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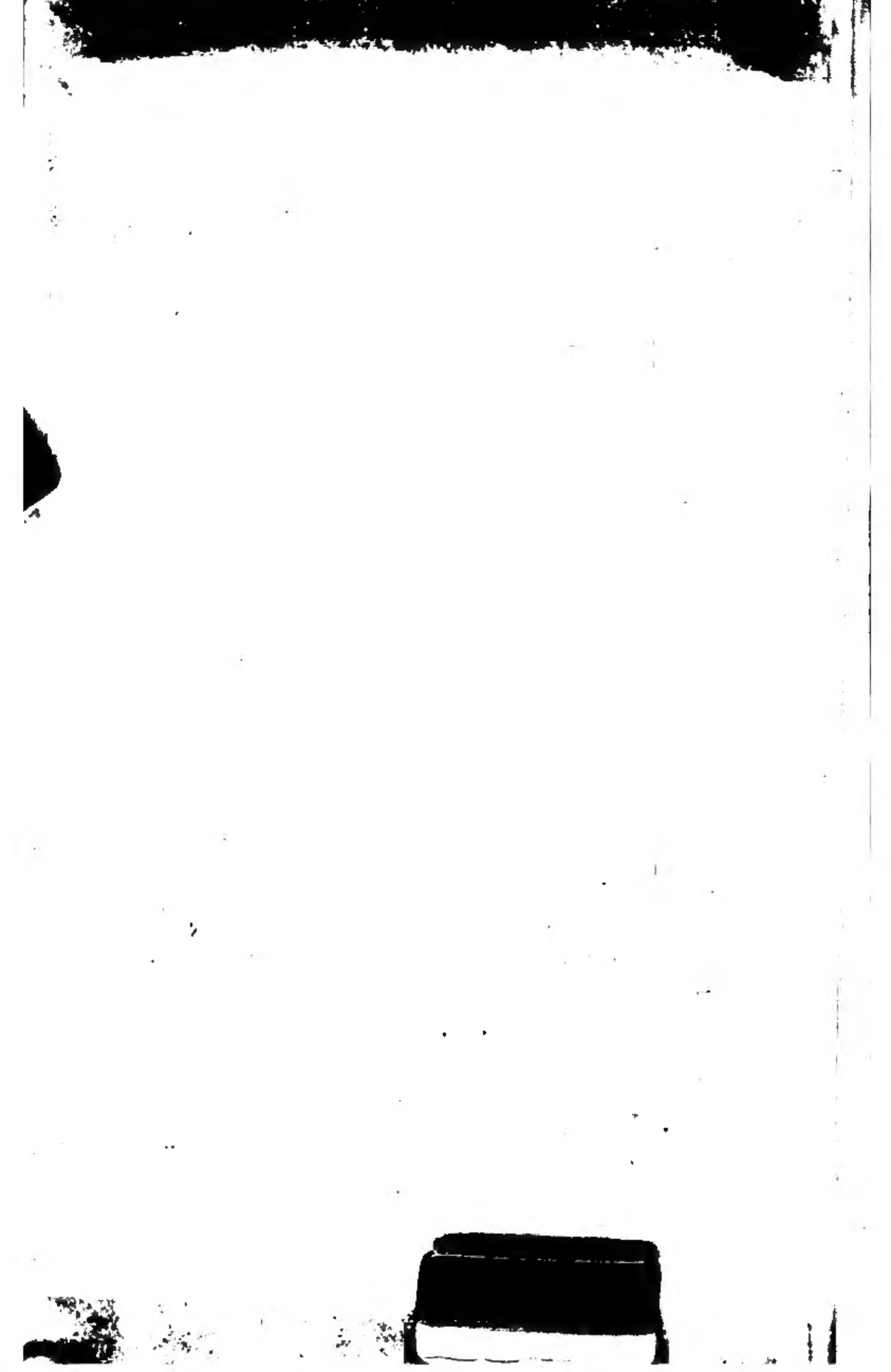
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DOCUMENTS
OF THE
SENATE
OF THE
STATE OF NEW YORK
ONE HUNDRED AND THIRTY-EIGHTH SESSION
1915

VOL. XXI.—No. 43 — PART 2

ALBANY
J. B. LYON COMPANY, PRINTERS
1916

Rogers
STATE OF NEW YORK

FOURTH REPORT

OF THE

FACTORY INVESTIGATING COMMISSION

1915

VOLUME II

APPENDIX IV
REPORT OF WAGE INVESTIGATION

TRANSMITTED TO THE LEGISLATURE FEBRUARY 15, 1915

ALBANY
J. B. LYON COMPANY, PRINTERS
1915

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No. 43

IN SENATE

FEBRUARY 15, 1915

FOURTH REPORT

OF THE

New York State Factory Investigating Commission

February 15, 1915

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CONTENTS

	PAGE
I. Scope and Character of the General Wage Investigation.....	1-50
Forms used	5
Special investigations conducted.....	15
Employees	22
Summary of expenses	23
Progress of investigation.....	25
Summary of office tabulation.....	28
Schedule of tables.....	29
II. Mercantile Establishments	51-174
1. Wages in Retail Stores.....	51-120
Collection of data.....	51
Distribution of stores.....	51
Functional divisions	52
Personnel	53
Sex	53
Age	54
Nativity	58
Conjugal condition	60
Occupations	61
Rates	63
Actual earnings	76
Commissions, premiums and bonuses.....	84
Deductions	85
Days worked	86
Hours	87
Extra help	89
Seasonal fluctuations.....	90
Shift	92
Time lost	95
Annual earnings	96
Experience	101
Earnings and experience.....	104
Changes in wages.....	113
Wages and sales.....	116
Earnings and marriage.....	117
Earnings and nativity.....	117
Status of the business.....	118
2. Organization and Working Conditions in Retail Stores....	121-167
Neighborhood stores	122
Five and ten cent stores.....	123

	PAGE
II. Mercantile Establishments — Continued:	
2. Organization and Working Conditions in Retail Stores — Cont'd:	
The urban department store.....	126
Management	126
Conditions of employment.....	128
Fluctuation of employees.....	132
Qualifications of employees.....	135
Physical requirements.....	135
Personal appearance.....	136
Manners	137
Educational qualifications.....	137
Age limits.....	139
Moral qualifications.....	139
Division of labor.....	141
Wages	149
Non-selling employees.....	149
Selling employees.....	151
Additions to wages.....	154
Deductions	155
Promotion	156
Discipline	160
Working conditions	161
Hours	163
Overtime	165
Welfare work	165
3. Mutual Aid Associations in New York City Stores.....	167-174
III. The Shirt Industry.....	175-230
Extent and character of the business.....	175
Personnel of workers.....	177
Occupations	179
Piece rates	185
Week rates	189
Actual weekly earnings.....	192
Wage and age.....	199
Experience	202
Days worked.....	208
Hours	209
Fluctuation of employment.....	211
Shift	214
Annual earnings.....	215
Home work.....	217
Wages and conjugal condition.....	223
Earnings and nativity.....	224
Prison-made shirts.....	225
Labor cost.....	226
IV. The Paper Box Industry.....	231-300
1. Wages in the Paper Box Industry.....	231-270
Character of shops.....	231
Personnel of workers.....	231

	PAGE
IV. The Paper Box Industry — Continued:	
1. Wages in the Paper Box Industry — <i>Continued</i> :	
Occupations	233
Paper box making.....	234
Rates of wages.....	237
Actual earnings.....	245
Days worked.....	248
Hours	248
Seasonal fluctuations	250
Shifting	253
Time lost.....	256
Annual earnings	257
Experience	262
Home work.....	266
Wages and marriage.....	267
Status of the trade.....	268
2. Report on Accidents in the Paper Box Industry — Marie S. Orenstein	271-300
V. The Confectionery Industry.....	301-338
Extent of industry.....	301
Definition of terms.....	303
Personnel	304
Occupations	307
Rates of wages.....	310
Actual earnings.....	315
Days worked	319
Hours	319
Seasonal fluctuations	321
Shifting	324
Annual earnings	326
Experience	331
Advance in wages.....	335
Wages and marriage.....	336
Earnings and nativity.....	337
Status of the trade.....	337
VI. The Button Industry — Roswell Skeel, Jr.....	339-359
Scope of investigation.....	339
Covered buttons	339
Development of the industry.....	340
Celluloid buttons	341
Process of manufacture.....	341
Development of the industry.....	342
Personnel	343
Occupations	344
Rates of wages.....	348
Conclusion	357
VII. Wages in the Millinery Trade — Mary Van Kleeck.....	361-469
Introduction	361
The millinery trade in New York.....	363

	PAGE
VII. Wages in the Millinery Trade — Mary Van Kleeck — <i>Continued</i>:	
Scope of investigation.....	365
Methods of investigation.....	367
Processes of work.....	374
Wage Rates	381
Length of employment in any one establishment in the calendar year	400
Weekly earnings while on payroll.....	402
Ages of milliners.....	417
Years in trade.....	418
Conjugal condition	421
Nativity	421
Conditions of work.....	424
Methods of hiring workers and determining wages.....	428
Summary	430
Appendix A.— Supplementary statistics New York millinery shops	435-448
Appendix B.— Tables showing wages in millinery workrooms in New York city department stores.....	449-459
Appendix C.— Tables showing wages in millinery workrooms in department stores in New York State, exclud- ing New York city.. ..	460-467
Appendix D.— Wages determination of the Milliners' Board of Victoria, Australia.....	468
VIII. Wages Paid by the New York Telephone Company.....	471
IX. Wages of Employees of Certain Public Utilities.....	482
X. The Relation of Irregular Employment to the Living Wage for Women — Irene Osgood Andrews.....	497-635
Table of contents.....	501
Introductory summary	505
Statement of the problem.....	505
The economic helplessness of women.....	507
Kinds of irregular work.....	509
Annual incomes.....	511
Dovetailing	515
The labor force.....	519
Statistical analysis of industries employing large numbers of women in which employment is irregular.....	527-629
Paper box	527
Confectionery	546
Clothing	570
Shirt-making	585
Miscellaneous needle trades	590
Bookbinding	599
Salesgirls	605
Laundries	614
Canning and preserving.....	622
Miscellaneous industries	624
Analysis of minimum wage awards issued to January 1, 1915..	630
Proposed measure to insure a steady income.....	633

165
167
174
181

I. SCOPE AND CHARACTER OF THE INVESTIGATION

00 The horrible loss of life in the Triangle fire, four years ago,
02 roused the people in New York State to demand protection for
17 the workers. The Factory Commission was then appointed to
18 study and recommend measures for safety. It was soon found that
21 other dangers besides the fire hazard menace the life and limbs
21 of employees — unguarded machines that mangle fingers just
24 a trifle slow, dust and poisonous vapors that clog the lungs and
28 dim the eyes. For these, too, safeguards were prescribed.
30

48 But not all working people are killed outright by violence or
59 industrial diseases. Perhaps most of them are worn out by long
hours of toil with insufficient rest. This is especially true of
women and children. Until recently, the United States was the
67 only civilized country that permitted women to work at night.
68 The Factory Commission stopped that here, and further limited
71 the hours of labor for children. It also insisted that wherever
82 possible, one day's rest in seven should be allowed to every person.

35 Yet, what is the use of demanding safe and sanitary factories,
01 if the men who work in them cannot earn enough to support their
05 families in health and comfort? It seems rather futile to protect
05 a girl from the evil effects of fatigue and overtime, if her wages
07 for the hours prescribed will not enable her to live decently and
09 have proper clothing. So the Commission was continued for the
11 purpose of inquiring into the wages of labor throughout the State
15 and into the advisability of fixing minimum rates by law. In
19 order to conduct this investigation, power was granted to sub-
29 poena witnesses and to examine all books and papers pertaining
527 to the inquiry.
546

570 In the summer of 1913 a Director and an Assistant were ap-
585 pointed, and detailed arrangements for the work were begun the
590 middle of August. Four weeks were then spent in outlining
594 plans. The methods and results of recent wage investigations
605 were studied, and a preliminary survey was made of conditions
614 in four low paid trades.
622
624
626
628

The first point to define was the scope of the investigation. It seemed essential to discover the following facts:

First: What wages are actually paid in typical industries throughout the State?

Second: Are these wages sufficient to maintain employees in simple decency and working efficiency?

Third: Are the industries able to increase wages on the basis of the earning capacity of labor?

In order to investigate these matters with the limited time and resources at the command of the Commission, the next step was to select typical low paid industries. For it was obviously impossible to attempt an adequate wage census of all occupations in the State.

The most recent source of comprehensive information on wages is Bulletin 93 of the Federal Census of Manufactures, on typical weekly earnings in 1904. The returns for New York are summarized in Bulletin 37 of the State Department of Labor for June, 1908. The essential figures are given herewith:

	AVERAGE WEEKLY EARNINGS			
	All wage earners	Men over 16 years	Women over 16 years	Children under 16 years
All industries. . . .	\$10.40	\$11.79	\$6.54	\$3.64
Canning.	6.35	8.59	4.71	3.32
Confectionery. . . .	7.12	10.73	5.09	3.35
Shirts.	7.29	10.08	6.29	4.00
Paper boxes.	7.32	10.13	5.65	2.71
Silk.	7.68	12.36	5.68	3.49
Knit goods.	7.70	9.06	7.12	4.15

The data show that the average earnings of all workers engaged in these six industries were considerably below the general level for the State. Canning appeared lowest, but the Commission had investigated this business in the summer of 1912, and presented its findings in its second report. In the fall of 1913, the State Department of Labor contemplated an examination of the knit goods industry in the Mohawk Valley, and the Federal Department of Labor had already studied the silk industry in its work on Women and Child Wage Earners. The manufacture of confectionery, shirts and paper boxes, therefore, seemed to be the most obvious low paid industries to consider.

The Commission had already determined to investigate wages in department stores, as a result of its preliminary study of these establishments in the winter of 1912. The large numbers of women and young persons employed, and the discussion as to their actual earnings aroused by the Civic Federation Report of July 15, 1913, stimulated the demand for an authoritative statement on existing conditions. Wage commissions elsewhere had found retail stores a fruitful field of inquiry, and New York City merchants invited examination.

In lines where women and children are numerous, labor is generally unorganized and wages are usually low. But females and young persons are particularly susceptible to evil consequences arising from privation and bad working conditions. So the proportion of such employees in different lines of business is significant. The Commission's preliminary investigation of retail stores throughout the State showed that two-thirds of the employees in mercantile establishments are women and children.¹ The Industrial Directory of New York for 1912 presented figures indicating that they constituted from one-half to three-fourths of the shop hands in the manufacturing lines selected.² Accordingly, these businesses were considered also because they include a disproportionately large number of minor and female workers.³

PROPORTION OF WOMEN AND CHILDREN IN BUSINESS.

	Number of employees	WOMEN		CHILDREN	
		Number	Per cent	Number	Per cent
3 All occupations (Federal census, 1910).....	4,000,000	958,000	24%	65,000	1.6%
1 Mercantile establishments.....	61,717	38,385	62%	3,746	6 %
2 Shirt and collar factories.....	30,786	22,076	74%	440	1 %
2 Paper box factories.....	15,277	9,159	60%	649	4 %
2 Confectionery factories.....	11,617	5,755	50%	342	3 %

Although these lines include a comparatively small part of all the workers in the State, they are fairly representative, in that the establishments are well distributed among the cities. Moreover, many of the industries that comprise larger numbers of

workers are either highly organized and well paid or widely scattered in many small shops. The latter circumstance made thorough investigation within a short time practically impossible. The clothing trades, the most important manufacturing lines in the State, were being investigated by both public and private agencies in the fall of 1913. So it seemed to us better to select a few typical industries for careful study, rather than to present scattering data for many lines. The distribution of factory employees throughout the State, according to the Industrial Directory for 1912, and the number of mercantile establishments in important cities according to Boyd's Dispatch for February, 1913, gave us the following clues as to the extent of field work necessary:

IMPORTANT CENTERS	CONFECTIONERY		PAPER-BOXES		MEN'S LINEN		DEPARTMENT STORES
	Establishments	Hands	Establishments	Hands	Establishments	Hands	Establishments
New York city.....	758	9,376	257	10,083	232	10,200	118
Buffalo.....	32	473	17	2,133	9	200	21
Rochester.....	18	574	21	1,024	5	17	5
Syracuse.....	7	218	5	193	4	52	10
Albany.....	25	213	3	129	7	1,191	2
Troy.....	10	24	5	247	32	13,068	3
Schenectady.....	6	14	1	52	1	7	5
Utica.....	6	55	4	157	.....	.....	7
Binghamton.....	8	111	2	143	1	19	8
Glens Falls.....	.....	.....	2	55	7	1,171	3
Kingston.....	.....	.....	.....	.....	4	725	2
Middletown.....	4	251	.....	.....	3	433	1
Total.....	874	11,309	317	14,216	305	27,083	185
Entire state.....	1,001	12,170	380	15,822	370	31,486	338

It appeared to us from this summary that we could obtain data for a very large percent of all persons employed in these lines by getting returns from the large establishments in ten industrial centers through the State.

The next point was to outline methods of obtaining the necessary information. Three principal sources seemed available.

First, the payrolls, time sheets and other records of the firms, so far as they deal with wages, hours of labor and output or sales. These furnish the most authentic data, and so far as possible, quantitative statements should be based on such original entries.

Second, the statements of employers or their responsible managers concerning general conditions, requirements and tendencies in the trade. Regarding matters of business policy, attitude toward employees, regulation, etc., such statements may be regarded as authoritative.

Third, the statement of employees as to their age, trade experience and domestic responsibilities. This personal testimony furnishes a means for discovering prevalence of overtime, slack work, fines, premiums and other alterations of wages, not easily obtainable from the employer or his books. Regarding the personal resources, expenditures and obligations of working people, their own testimony is, of course, essential.

FORMS USED

Having determined upon these sources of information, we then began to work out schedule forms for entering the data obtained. For this purpose, the Assistant Director obtained the forms used in similar investigations throughout the country, and sought the advice of the Federal statistical authorities at Washington.

Ten regular card forms and several supplementary blanks were drafted. The following cuts, with brief explanation will make plain the manner in which data were scheduled.

NEW YORK STATE FACTORY COMMISSION			FORM I A.
	EMPLOYEE'S NO.	DEPT.	
NAME		MALE OR FEMALE ?	
ADDRESS	CITY OR BOROUGH		ARE YOU SINGLE, MARRIED, WIDOWED OR DIVORCED ?
COUNTRY OF BIRTH	AGE	YEARS	
HOW LONG HAVE YOU BEEN WORKING FOR WAGES ?			YEARS
HOW LONG HAVE YOU BEEN IN THIS TRADE OR BUSINESS ?			
HOW LONG HAVE YOU BEEN WORKING FOR THIS FIRM ?			
WHAT IS YOUR REGULAR WORK HERE ?			
DO YOU PAY BOARD ?	DO YOU LIVE WITH PARENTS ?	DO YOU LIVE IN FURNISHED ROOM ?	
	WITH OTHER RELATIVES ?	PRIVATE HOUSE ? APARTMENT ?	
	WITH STRANGERS ?	BOARDING HOUSE ? HOTEL ?	

Form 1 contains the personal information desired of all employees at the time an establishment was scheduled. The cards were, as a rule, distributed and collected with the aid of the firms. In a number of instances — particularly in factories employing many foreigners — the Commission's agents were obliged to interview employees at their work in order to obtain the replies.

In the course of the investigation the wording of some queries was slightly modified. Thus, "How long have you been working for wages?" was found to assure better returns than the original question which read, "How old were you when you began to work for wages?" The original queries at the bottom of the card were, "Do you Board?" and "Do you live at home?" These questions were changed in order that domicile and relationship might be indicated more specifically.

ESTABLISHMENT		EMPLOYEE'S NO.		DEPARTMENT		N. Y. S. F. I. C. FORM 2 A																			
NAME						DAYS ENDING																			
						MALE		FEMALE		AGE															
ADDRESS						BOROUGH																			
OCCUPATION						CONJUGAL CONDITION																			
						S	M	W	D	N R															
<table border="1"> <tr> <td rowspan="2">RATE OF PAY</td> <td>PIECE</td> <td>HOUR</td> <td>DAY</td> <td>WEEK</td> <td>½ MONTH</td> <td>MONTH</td> <td rowspan="2">ADDITIONS</td> </tr> <tr> <td></td> <td>\$0.</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> <td>\$</td> </tr> </table>											RATE OF PAY	PIECE	HOUR	DAY	WEEK	½ MONTH	MONTH	ADDITIONS		\$0.	\$	\$	\$	\$	\$
RATE OF PAY	PIECE	HOUR	DAY	WEEK	½ MONTH	MONTH	ADDITIONS																		
		\$0.	\$	\$	\$	\$		\$																	
DAYS WORKED	REGULAR WEEKLY HOURS	HOURS WORKED THIS PERIOD	OVERTIME HOURS	UNDERTIME HOURS	EARNINGS		DEDUCTIONS																		
					THIS PERIOD	COMPUTED FOR REGULAR TIME																			
					\$	\$	\$																		
COUNTRY OF BIRTH			TIME AT WORK		IN THIS TRADE		THIS FIRM																		
PAY BOARD	YES	NO	N R	LIVE WITH	P	R	S	N R	LIVE IN	F	P	A	B	H	N R										
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										

Form 2 contains all the personal information transcribed from *Form 1**, and in addition wage data from the firms' original records. This is the form from which both wage and personal tabulations were made.

* The abbreviations under "Conjugal Condition" signify: single, married, widowed, divorced, not reported. Similarly, the abbreviations at the bottom of the card refer to the questions regarding domicile asked on *Form 1 A*.

[illegible]

A representative payroll week was selected, wherever possible. The prime facts sought in regard to wages were, (a) the basis and rate of payment; (b) the regular working hours and the hours worked during the selected interval; (c) the amount actually received as wages. In the case of piece workers, because of the multiplicity of rates, only the fact that they worked at piece rates could be indicated. The actual working time of piece workers is practically nowhere obtainable. All additional payments as well as deductions, other than those for overtime and undertime, were separately indicated.

Form 3 is designed to give conspectus of employment and wages in the various occupations. Opposite each occupation, check marks indicate whether it is machine or hand work, and whether those engaged in it are males or females in the age groups below 16 or 16 and over. Under "Rate of pay," piece work is indicated by a check mark; for week workers the variation of rates is shown. For piece workers, there is also shown the employer's statement of the amount that a good but not exceptional worker might fairly be expected to earn in a regular working week, as well as typical piece rates paid for standard operations. The remaining headings aim to bring out the difference in pay to beginners and to experienced persons, and the kinds of additions and deductions affecting regular earnings.

Form 4 provides information in detail regarding working hours.

Form 5 was used for recording the earnings of individuals, week by week. Annual records were available in only a relatively small number of establishments. The method followed had to be modified according to the form and condition of the records. In general, this form was used for all employees, regardless of how long they had been with the firm, provided they were on the payroll for four weeks or more preceding the time of agent's visit. In a few instances the record was taken for steady workers only; in others, if the payroll was practicable for the purpose, the records of all employees during the twelve-month period was taken, giving a complete picture of employment for the period.

STABLISHMENT		EMPLOYEE'S NO.		INDIVIDUAL ANNUAL EARNINGS				N.Y.S.F.I.C.-Form 5.	
NAME				ADDRESS				AGENT	
OCCUPATION								M16+M16-F16+F16-	
PAYROLL PERIODS — DAYS EACH, COMMENCING				191		EARNINGS		COMPUTED EARNINGS 52 WEEKS	
Pay- Days		HOURS		RATE OF PAY		NET EARNINGS		COMPUTED % OF TOTAL ACTUAL EARNINGS	
ROLL WORKED		WORKED		P OTHER		P OTHER		ADDITIONS DEDUCTIONS	
1		14							
2		15							
3		16							
33		46							
34		47							
35		48							
36		49							
37		50							
38		51							
39		52							

ESTABLISHMENT

N.Y.S.F.I.C.-Form 6

WAGES AND NUMBER OF EMPLOYEES.

PAYROLL PERIODS			DAYS EACH,		COMMENCING		191		AGENT	
AVERAGE NUMBER OF EMPLOYEES			AVERAGE WAGE PAYMENTS PER WEEK		TOTAL WAGES		AV. INDIVIDUAL WAGES PER WK.			
PAY-ROLL	NUMBER OF EMPLOYEES	TOTAL WAGES \$	AVERAGE WAGES \$		PAY-ROLL	NUMBER OF EMPLOYEES	TOTAL WAGES \$	AVERAGE WAGES \$		
			\$	¢				\$	¢	
1					27					
2					28					
3					29					
4					30					
5					31					
6					32					
7					33					
8					34					
9					35					
10					36					
11					37					
12					38					
13					39					
14					40					
15					41					
16					42					
17					43					
18					44					
19					45					
20					46					
21					47					
22					48					
23					49					
24					50					
25					51					
26					52					

Four 6-

Form 6 presents a summary of wages and number of employees week by week, for a period of one year. The twelve-month period was the same for all establishments in one industry, but differed somewhat for the several lines investigated. Executive employees were not included in totals either of the number of employees or of wages paid.

ESTABLISHMENT		EMPLOYEE'S NUMBER		DEPT		N.Y.S.F.I.C.—Form 7. REGULARITY AND DURATION OF EMPLOYMENT							M | F	
NAME														
1	2	3	4	5	6	7	8	9	10	11	12	13		
14	15	16	17	18	19	20	21	22	23	24	25	26		
27	28	29	30	31	32	33	34	35	36	37	38	39		
40	41	42	43	44	45	46	47	48	49	50	51	52		
OCCUPATION							DATE PAYROLL		RATE P \$ ¢			EARNINGS \$ ¢		WEEKS WORKED
FIRST ENTRY														
LAST ENTRY														

Form 7 serves as a briefer record of the same sort as 5. It was found useful especially in establishments having a great amount of shifting of personnel, in places where no record of working time was available, and in other cases in which the use of *Form 5* was impracticable. The small squares represent weeks. The usual method was to put a check mark in each of the squares corresponding to the weeks in which the individual was employed. But the squares are also adapted for noting amounts earned or the time worked. The items at the bottom of the card give essential wage data.

Form 8 was filled by agents following an interview with the worker, either in the place of employment during working hours or at home. It gives the individual "trade history," and in so far as it refers to present employment serves also to check information derived from other sources. The individuals interviewed were selected as far as possible to represent fairly the various branches of industry, as well as age periods and wage groups.

SCOPE OF INVESTIGATION

13

N. Y. S. F. I. C. Form 8

No.

DATE

AGENT

NAME

ADDRESS

INDUSTRY

OCCUPATION

FIRM

YEARS AT WORK

THIS TRADE

PRESENT FIRM

DIFFERENT TRADES ENGAGED IN AND TIME IN EACH

REASONS FOR CHANGES

DIFFERENT LINES OF WORK IN PRESENT TRADE

REASONS FOR CHANGES

METHODS OF ADVANCEMENT

UNION MEMBER

TRADE TENDENCIES

EARNINGS PER WEEK, BEGINNING U. S.

PRESENT

USUAL

DULL

RUSH

AVERAGE WEEKLY OUTPUT (PIECE)

ADDITIONAL TO WAGES: KIND

AMOUNTS

ASSESSMENTS: KIND

AMOUNTS

DEDUCTIONS: KIND

AMOUNTS

OUTSIDE WORK

W'KLY EARNINGS

|| TOTAL EARNINGS PER YEAR

REGULAR HOURS

DAYS		BEGIN	LUNCH	STOP	HRS. PER DAY	HRS. PER WK.
ORDINARY						}
SHORT						
LONG						

RUSH SEASON: WHEN

HOURS PER WEEK

SLACK SEASON: WHEN

HOURS PER WEEK

OVERTIME: AMOUNT PER DAY

PER WEEK

RATE OF PAY

NIGHT WORK: AM'T PER DAY

PER WEEK

RATE OF PAY

SUNDAYS:
WORKED PAST YEAR

HOLIDAYS:
OFF PAST YEAR

VACATIONS: WHEN

HOW LONG

RATE OF PAY

OUT OF WORK

DAYS PAST YEAR

SHUTDOWN: DAYS PAST YEAR

OTHER REASONS:

No. _____				
DATE _____		AGENT _____		
NAME _____		ADDRESS _____		
INDUSTRY _____	OCCUPATION _____		FIRM _____	
SEX _____	AGE _____	BIRTHPLACE _____	YRS. IN U. S. _____	
FATHER'S NATIONALITY _____		CONJUGAL CONDITION _____		
SCHOOLS ATTENDED: KIND _____				
WHERE _____			GRADE _____	
AGE LEAVING _____		REASONS LEAVING _____		
TRADE TRAINING _____				
WHOLLY SELF-SUPPORTING _____		SUPPORTING OTHERS _____		
AID WHEN UNEMPLOYED _____				
LIVE AT HOME _____		CONTRIBUTION TO FAMILY _____		
OTHER MEMBERS OF FAMILY				
RELATION	AGE	WORK	WEEKLY EARNINGS	AMOUNTS CONTRIB- UTED TO FAMILY
1				
2				
3				
4				
5				
6				
7				
8				
9				
WEEKLY EXPENSES:				
BOARD: PLACE	COST PER WEEK		FURNISHED ROOM: COST	
CARFARE	LUNCHES			
LAUNDRY	SPENDING MONEY			
CLOTHES PER YEAR	DUES PER MONTH			
SAVINGS: _____				

Form 9 is a personal schedule, complementary to Form 8, and contains information obtained from personal interviews regarding the financial, family and other relationship of employees.

THE COMMISSION IS MAKING A STUDY OF EMPLOYMENT AND WAGES.
IT ASKS YOUR HELP IN GETTING THE FOLLOWING INFORMATION. PLEASE ANSWER QUESTIONS ACCURATELY.
ALL NAMES WILL BE KEPT IN STRICT CONFIDENCE.

AGENCY	DATE	
SEX?	WHERE WERE YOU BORN?	HOW LONG IN U. S.?
WHERE WAS YOUR FATHER BORN?	WHERE WAS YOUR MOTHER BORN?	
ARE YOU SINGLE, MARRIED OR WIDOWED?	HOW OLD WERE YOU WHEN YOU BEGAN TO WORK?	
NAME OF FIRM FOR WHOM YOU NOW WORK	WHAT IS THEIR BUSINESS?	
WHAT WORK DO YOU DO?	IF NOW OUT OF WORK, WHAT DID YOU DO LAST?	
ARE YOU PAID BY THE PIECE OR WEEK WORK?	HOW MUCH DO YOU EARN A WEEK, FULL TIME?	
HOW MUCH DID YOU EARN LAST WEEK?	HOW MANY WEEKS OUT OF WORK IN LAST 12 MONTHS?	
HOW MANY WEEKS HAVE YOU WORKED PART TIME IN THE PAST 12 MONTHS?		
DO YOU SUPPORT YOURSELF ENTIRELY?	WHO HELPS YOU WHEN YOU ARE OUT OF WORK?	
DO YOU HELP SUPPORT ANYONE BESIDES YOURSELF?	IF SO, WHOM?	
DO YOU LIVE AT HOME?	HOW MANY PERSONS IN YOUR FAMILY BESIDE YOURSELF?	
HOW MUCH DO YOU GIVE YOUR FAMILY WEEKLY?		
DO YOU BOARD WITH RELATIVES?	WITH FRIENDS?	WITH STRANGERS?
DO YOU LIVE IN A FURNISHED ROOM?		

IF YOU LIVE AT HOME, WRITE BELOW A LIST OF EVERYBODY IN YOUR FAMILY AT HOME, STATING THEIR RELATION TO YOU,
AS: 1. FATHER, 2. MOTHER, 3. SISTER, 4. BOARDER, ETC.

1.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
2.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
3.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
4.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
5.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
6.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
7.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
8.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
9.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
10.	AGE	WORK	WEEKLY EARNINGS \$	AMOUNT GIVEN TO FAMILY WEEKLY \$
HOW MUCH DO YOU SPEND A WEEK FOR LUNCHES ?			FOR CARFARE ?	FOR AMUSEMENTS ?
FOR LAUNDRY ?			HOW MUCH DO YOU SPEND A YEAR FOR CLOTHES ?	
TO WHAT UNIONS, CLUBS, ETC., DO YOU PAY DUES ?			HOW MUCH PER MONTH ?	
HOW MUCH MONTHLY INSURANCE ?			HAVE YOU ANY SAVINGS ?	
IF YOU BOARD, HOW MUCH DO YOU PAY A WEEK FOR ROOM ?			FOR MEALS ?	ROOM & MEALS ?
NAME		ADDRESS		
WILL YOU KEEP ACCOUNTS IF WE SEND YOU AN ACCOUNT BOOK ?				

NEW YORK STATE FACTORY COMMISSION

RELIEF CARD

CLOSED

DATE OPENED

AGENT

MEMBERS OF HOUSEHOLD	AGE	BIRTHPLACE	RACE	YEARS IN		OCCUPATION	BUSINESS	YRS. IN TRADE	WAGE	EMPLOYED
				U. S.	N. Y.					
HEAD										
SPOUSE										
CHILD										
RELATIVE										
BOARDER										

SCOPE OF INVESTIGATION

[FOR PRINCIPAL WAGE EARNER]

HEALTH (General)

DISABILITIES

EDUCATION—Last School and Grade Attended

AGE AT LEAVING

PERSONAL CHARACTERISTICS

CAUSES OF DEPENDENCY

Form 10. This schedule is the result of conferences and suggestions of leading social workers. It was designed for wide but judicious distribution by schools, social settlements, church societies, Y. M. C. A., Y. W. C. A., Consumers' League branches, and other welfare organizations. It was hoped that a collection of such schedules from different industries and localities would throw much light not only on the specific problem of wages but even more on standards of living, education, and related subjects. Thousands of schedules were distributed. The results, however, have been disappointing both as regards the number of returns and the completeness with which the questions are answered. No use, therefore, was made of the returns.

Form 11. This card was prepared for the transcription of data from the records of relief-giving agencies, in order to ascertain the relation of wages to dependency. Over 2,000 cases were thus recorded through the co-operation of the Charity Organization Society, the Association for Improving the Condition of the Poor and the United Hebrew Charities, in Manhattan, and the Brooklyn Bureau of Charities.

On September 26, 1913, a meeting of the Advisory Committee was called to consider the plans proposed, and to suggest the best methods of accomplishment. This committee consisted of expert investigators, statisticians, economists, social workers and practical business men. Members were subsequently requested by letter and interview to criticise the outline and forms submitted. The prevailing opinion was that two or three trades should be studied thoroughly throughout the State; that all employees in the establishments, both men and women, should be included; and that some examination of the personal circumstances of wage earners should be made. Several persons urged the study of low paid lines in which men only are engaged, but this did not meet with general approval.

Some of the lines of investigation that open out from the question of wages, were important enough to develop as special studies under responsible directors. Thus the matter of what other states

are doing in minimum wage legislation was broadened into a separate study by Irene Osgood Andrews, Assistant Secretary of the American Association for Labor Legislation, and appeared as an appendix to the preliminary report. In like manner the study of fire hazards in the stores was dealt with by Miss Frances Perkins, of the Committee on Safety.

The very important problem of the cost and standard of living for working people is necessarily involved in any thorough discussion of wages. The adequacy of earnings could not be determined unless the actual things purchased and the conditions secured by the money received, were known. So, although our collection of data included interviews with employees concerning their home conditions, we soon realized that the proper treatment of these data required concentrated attention. For this reason the Commission selected Professor Frank H. Streightoff, who was already known as a writer on the standard of living, to organize and present the material concerning this side of the problem.

Another matter intimately connected with the earning capacity of workers is their general education and special training for the occupation they follow. Many persons assert that wages depend primarily upon efficiency. If, therefore, wise vocational guidance and adequate preparation for trade and industry were available, we need have no wage problem. Only the slothful and incompetent would fail to earn their living—so we are told.

In view of this attitude, the Commission deemed it wise to make a special investigation of the relation between education and earnings. For this purpose they sought the aid of the State Department of Education, and secured the co-operation of President Finley. Through his interest, Mr. L. A. Wilson was given part time to conduct this study throughout the State. The results form a section of the Commission's report.

Because of the importance of irregularity of employment in connection with earnings, Mrs. Irene Osgood Andrews was asked

to make special study of this matter which appears as a separate section of this report. We should also mention the collateral study of wages in the millinery trade conducted on lines similar to those of our investigation, by Miss Mary Van Kleeck of the Sage Foundation, and presented in another section of this report. In like manner, Mr. Roswell Skeel, Jr., personally examined conditions in the local button and umbrella industries. These reports supplement and corroborate the wage findings of the Commission. Mrs. Marie S. Orenstein has also presented a special investigation of the connection between industrial accidents and wages. The account of the general organization and methods of department stores was prepared by Mr. Baron, who also supervised the drawing of tables and charts for the descriptive summary of the different industries. Miss Sims prepared the statistical appendix.

The organization of a staff of field agents and statistical helpers for the wage investigation, was left to the Director, in consultation with a sub-committee of the Commission, consisting of the Chairman, Vice-Chairman and Chief Counsel. It was understood that only the experience and ability of candidates in such work would be considered in their appointment.

Before the work was begun fifty-six persons applied by letter, and sixteen others called directly. Forty-eight applicants were interviewed personally before any nominations were made. In selecting the entire staff, which at no time exceeded twenty-one people, and which at various times included forty-one different persons, the Director saw and investigated one hundred and thirteen individuals.

Some of these persons had already done good work with the Commission; others had gained similar experience in labor investigations in other States or with the Federal government. The assistance of four inspectors was granted by the State Labor Department, and an accountant was loaned for six weeks by the Comptroller. A trained corps was about to be released by the Wage Scale Board of the Dress and Shirtwaist Industries in

New York City. Social workers and students of economic problems sought wider acquaintance in the industrial field. It was from such material that we built up our staff of investigators.

At first we threw sixteen agents into the field. But as the material began to come in, it was found necessary to organize an office force to edit, transcribe and tabulate the returns. Three field agents were at first withdrawn for this purpose and three low paid clerks were employed to perform the mechanical work of copying and sorting. As the data accumulated, it was found desirable to specialize the office force. So we obtained from mercantile establishments and college laboratories a corps of file clerks, tabulators and statisticians, varying in number from ten to twelve. Some of these persons had practical experience as bookkeepers, and others had been trained in the theory of statistical methods.

We must not forget to mention the services of volunteer helpers both in the office and outside. Mr. Roswell Skeel, Jr., an experienced home visitor, gave half his time for several months, working as a regular field agent. Students from the School of Philanthropy assisted in gathering personal data; a Columbia man clerked in one of the stores during the holiday season to gain practical experience; and members of the statistical course at City College gave us part of their afternoons in tabulating. Altogether eleven persons have contributed their services for longer or shorter periods, merely from their interest in the work or in order to study our methods.

Herewith is presented a list of all persons regularly employed in this investigation, together with the titles of their positions and the dates of incumbency. It is to the industry and devotion of this group of persons that any credit for the extent and thoroughness of this investigation is due.

EMPLOYEES

ADMINISTRATION

Howard B. Woolston.....	Director of In- vestigation.	Aug. 18, 1913 to Oct. 1, 1914
Albert H. N. Baron.....	Ass't Di'tor of Investiga- tion.....	July 23, 1913 to Oct. 1, 1914
Dorothy Shientag	Stenographer and Book- keeper.....	Sept. 8, 1913 to Oct. 1, 1914

OFFICE

Mary S. Sims.....	Statistician..	Sept. 22, 1913 to Oct. 1, 1914
*Mabel Coleman	Statistician..	Dec. 22, 1913 to June 15, 1914
Edith Holman	Statistician..	Dec. 22, 1913 to March 14, 1914
Helen Nutting	Statistician..	May 4, 1914 to Oct. 7, 1914
*Katherine Tyng	Statistician..	July 14, 1914 to Oct. 1, 1914
Ruth Collins	Tabulator....	Oct. 1, 1913 to April 23, 1914
Theresa Lint	Tabulator....	Nov. 3, 1913 to March 1, 1914
Stella Packard	Tabulator....	April 20, 1914 to July 4, 1914
Elsie Rollins	Tabulator....	April 20, 1914 to Oct. 3, 1914
Joseph Vital dePorte.....	Tabulator....	May 1, 1914 to Sept. 22, 1914
Morris Tabachnick	Tabulator....	April 1, 1914 to Aug. 22, 1914
Anna B. Salzman.....	Tabulator....	July 14, 1914 to Aug. 1, 1914
Cecelia Algeo	Tabulator....	Aug. 3, 1914 to Aug. 22, 1914
Flora Coleman	Tabulator....	April 16, 1914 to Oct. 7, 1914
*Rose Kass	Office Helper.	Oct. 6, 1913 to Sept. 15, 1914
*Helen Adams	Office Helper.	Nov. 3, 1913 to May 2, 1914
Augusta von Stein.....	Office Helper.	April 9, 1914 to Sept. 12, 1914
Mae Benson	File Clerk...	Oct. 6, 1913 to Feb. 1, 1914
Catharine Marx	File Clerk...	May 18, 1914 to Sept. 19, 1914
Edgar L. Kost.....	Dr'ghtsman..	Sept. 18, 1914 to Oct. 3, 1914

FIELD

Samuel S. Hartzman.....	Special Inves- tigator	Sept. 15, 1913 to Feb. 1, 1914
Emil Frankel	Special Inves- tigator	Sept. 15, 1913 to Feb. 1, 1914
Marie Kasten	Special Inves- tigator	Sept. 22, 1913 to Dec. 15, 1914
*Ethel R. Evans.....	Investigator..	Sept. 22, 1913 to July 4, 1914
*Gertrude E. Smith.....	Investigator..	Sept. 22, 1913 to July 3, 1914
*Michael Gordin	Investigator..	Sept. 22, 1913 to July 2, 1914
*Robert J. Spencer.....	Investigator..	Sept. 22, 1913 to July 2, 1914
*Esther Packard	Investigator..	Sept. 22, 1913 to June 15, 1914
Mabel Mattingly.....	Investigator..	Sept. 22, 1913 to Dec. 22, 1913
*Alice S. Cheyney.....	Investigator..	Oct. 1, 1913 to Aug. 1, 1914
Ruth Collins.....	Investigator..	April 24, 1914 to July 11, 1914
†Roswell Skeel, Jr.....	Investigator..	Nov. 3, 1913 to Oct. 1, 1914
‡H. M. Anderson.....	Accountant..	Nov. 10, 1913 to Dec. 22, 1913

DETAILED BY LABOR DEPARTMENT

Marie S. Orenstein.....	Investigator..	Oct. 4, 1913 to Oct. 1, 1914
George S. Cangialosi.....	Investigator..	Sept. 25, 1913 to July 11, 1914
Joseph S. Altschul.....	Investigator..	Sept. 25, 1913 to Feb. 19, 1914
Frank L. Fisher.....	Investigator..	Jan. 12, 1913 to Feb. 16, 1913

* With interruptions.

† Volunteer Worker.

‡ Detailed by State Comptroller.

The following statement of receipts and expenditures presents a general account of the main items of cost for the investigation,* while the office of Director was maintained, i. e., from August, 1913 to October 1, 1914.

SUMMARY OF EXPENSES

Received from commission.....	\$28,987 54
<i>Expenses:</i>	
Administration and office.....	\$16,619 42
Field	8,839 50
Office expenses	3,384 78
	<hr/>
	\$28,843 70
Returned to Commission.....	\$143 84§

ADMINISTRATION AND OFFICE

Salaries:

Director of Investigation at \$416.67 per month.....	\$5,604 88
Assistant Director of Investigation at \$250 per month.....	2,964 78
Stenographer and bookkeeper at \$75 per month.....	957 50
1 statistician at \$125 per month.....	929 44
4 statisticians at \$100 per month.....	1,579 60
1 statistician at \$25 per week.....	152 09
4 tabulators at \$75 per month.....	1,335 16
1 tabulator at \$60 per month.....	343 55
3 tabulators at \$20 per week.....	370 00
4 tabulators at \$15 per week.....	652 50
1 office helper at \$60 per month.....	366 00
2 office helpers at \$50 per month.....	233 23
1 file clerk at \$40 per month.....	69 33
3 file clerks at \$12 per week.....	448 00
4 file clerks at \$10 per week.....	335 85
1 draughtsman at \$20 per week.....	46 67
1 draughtsman at \$3.50 per day.....	7 00
1 stenographer at \$3 per day.....	4 50
Preparation of minium wage legislation report.....	100 00
	<hr/>
	\$16,500 08

Traveling and incidental expenses (car fares, telephone and postage)	119 34
	<hr/>
	\$16,619 42

FIELD

Salaries:

Assistant director at \$350 per month.....	\$850 91
1 investigator at \$200 per month.....	472 48
5 investigators at \$175 per month.....	2,020 21
4 investigators at \$125 per month.....	1,687 51
7 investigators at \$100 per month.....	3,000 07
2 clerks at \$15 per week.....	30 00
2 assistant investigators at \$10 per week.....	80 00

* This does not include the expenses of the various special investigations, e. g., Standard of Living, Industrial Education, etc.

§ This sum was used to pay bills received by the Director's office prior to October 1, 1914.

1 stenographer at \$6 per week.....	\$36 00
2 copyists at \$6 per week.....	12 00
4 copyists at \$1.50 per day.....	39 00
	<hr/>
	\$8,228 18
Expenses of investigator from Labor Department.....	233 67
Stenographic services	29 05
Janitorial services	9 00
	<hr/>
	\$8,499 90
Traveling and incidental expenses (car fares, telephone and post- age)	339 60
	<hr/>
	<u>\$8,839 50</u>

OFFICE EXPENSES

Rent at \$100 per month.....	\$1,250 00
Telephone	142 36
Furniture	197 87
2 typewriters at \$2.50 per month.....	64 50
Adding machine at \$12.50 per month.....	137 50
Printing	841 91
Mimeographing	120 25
Blue prints	52 92
Stationery	315 97
Filing cabinets and boxes.....	46 70
Duplicating machine	18 49
Postage	72 70
Notary public	18 76
Expressage	11 44
Spring water	15 00
Ice	19 92
Towels	28 38
Miscellaneous	30 11
	<hr/>
	<u>\$3,384 78</u>

The direction of the field work was put under the immediate supervision of the Assistant Director, and Miss Mary Sims was placed in charge of the tabulation. The Director shared with them the responsibility for the general methods adopted in securing and presenting wage data.

It was deemed advisable to begin with the industries, which were commencing to show the stimulation of the approaching holiday season, and then to take the stores when their payroll was greatest. In this way we hoped to obtain the largest number of returns with the least expenditure of time and effort. It

also afforded an opportunity to examine directly conditions of overtime, extra help, commissions and other matters affecting wages.

It was also thought best to begin with the investigation in New York City, before sending our agents up-state. In this way we hoped to watch their work closely, until they were thoroughly prepared for independent and uniform treatment of data, away from constant advice. We also expected to have a very good idea of the industries selected, because such a large proportion of all lines is centered in New York.

The attitude of most business men toward the investigation was that of frankness and interest. We cannot say that they were particularly pleased to have our investigators examine their accounts and question their employees during a busy season; but when they understood the reason for so doing, the majority spared neither time nor pains to make our returns accurate and intelligible. When convinced of the scientific character of the study, and assured that no names or figures easily identified would be used, several representative firms gave us cost and financial statements. "We have nothing to conceal," they said. "We are proud of our business; and since you are going to investigate it, we want you to get the facts right."

The Retail Dry Goods Association, which includes most of the large downtown department stores in New York City, promised their co-operation from the beginning. Representatives from the Association were members of the Advisory Committee, which approved the plan of investigation. Later, when organization among retail clerks in the city was agitated, officers of the association doubted the advisability of having employees give their names and addresses, for fear these might somehow fall into the hands of unionizers. Although identification by number is difficult where a shifting force is concerned, it was deemed advisable to concede a modification in the form of the record, rather than to arouse antagonism among the merchants. The same stand was taken by the merchants of Buffalo, in view of

the recent strike among store employees there. In this case also, the method of obtaining personal information was adopted to the situation. But with the exception of these two groups and a single firm in Rochester, no opposition to the regular procedure of the investigation was encountered.

Among the employees we found a general willingness to tell about their industrial experience. Some of the women objected to stating their age, and a few of the retail clerks were unwilling to give personal information until they understood the character of the investigation. When questions about their domestic economy were asked, some persons showed a marked tendency to forget. Facts regarding overtime and deductions from wages were sometimes slow in coming, until the agent assured the informer that no names were to be disclosed. It was very difficult to obtain such information when representatives of the firm insisted upon being present. But in general, the investigators were well received and obtained a wealth of personal data from the workers.

The investigation was begun in New York City on September 15, 1913, and was continued, with a field staff numbering from three to sixteen, until February 15, 1914. The field work was then suspended, awaiting the action of the Legislature regarding the continuance of the work. A period of five months was thus given to the actual investigation in New York City, divided approximately as follows: September 15th to October 31st, confectionery, 63 establishments; November 1st to December 6th, paper boxes, 194; December 1st to February 15th (with interruptions), mercantile establishments, 56; and December 10th to February 15th, shirt factories, 77. The study of one industry could not always be completed before a second was taken up; nor could work be prosecuted continuously. For a period of one month, from the middle of December, the investigation of stores was halted, and the time chiefly given to the investigation of shirt factories. Some of the field investigators were also engaged in office work, preparing the material for the preliminary report to the Legislature on the confectionery and paper box industries in New York City, which was submitted February 15th.

In addition to the work mentioned, brief surveys were also made of a number of industries and occupations, with a view of ascertaining the advisability of studying them more in detail. Among these were janitorial service, and the manufacture of silk, umbrellas, handkerchiefs, pipes and paper patterns. A more extended study was also made of button factories.

As soon as the legislative appropriation for the continuation of the work became available, two divisions were organized to work simultaneously outside of New York City. The Assistant Director, Mr. Baron, was assigned, with four investigators, to the western part of the State; and Miss Ethel R. Evans, with three assistants, to the Troy-Albany section. It was planned to give ten weeks' time to the up-State work.

For one month, commencing April 20th, the western division was engaged in Buffalo and nearby places, and obtained data from 50 establishments — 7 confectionery, 11 paper boxes, and 4 shirt factories; 10 department stores, 10 5 and 10c. stores, and 8 neighborhood stores.

In three weeks, May 21st–June 10th, spent in Rochester, data were obtained from 34 firms — 6 confectionery, 19 paper boxes, 7 department stores, and 2-5 and 10c. stores. During the two weeks following, June 11–24, data were obtained from 23 firms in Syracuse, Oswego, and vicinity — 6 confectionery, 5 paper boxes, 2 shirts, 5 department stores, and 5, 5 and 10c. stores. In the following week, June 25–30, in Binghamton, 8 establishments — 1 confectionery, 3 paper boxes, and 4 stores — were scheduled. The last stop, at Middletown, July 1–3, gave returns for 9 firms — 1 confectionery, 2 paper boxes, 2 shirts and 4 stores.

The eastern division worked in the cities and towns along the Hudson, and in Utica. The larger part of the time was spent in the great shirt and collar manufacturing region, of which Troy is the center. The dates of the itinerary and the number of investigators engaged in each locality were as follows: Troy, 1 to 4 agents, April 24th to May 28th; Albany, 4, May 29th to June 17th; Glens Falls, 2, June 18th to July 7th; Kingston, 2, July 8th to July 11th; Schenectady, 2, June 18th to June 23d; Utica, 2, June 24th to July 3d. In all, 77 establishments were investigated, divided as follows: Confectionery, 2; paper boxes, 16; shirts, 28; department stores, 24; 5 and 10c. stores, 7.

It may be noted here that in the absence of authentic classified lists of establishments, we were obliged to resort to numerous sources for names and addresses of firms in the various lines. We are under obligations to many firms and individuals in the several industries and localities for information. However, even the industrial leaders, both employers and employees, could not furnish adequate data regarding their industries, and it was impossible to obtain up-to-date lists in advance for our investigators. Much time was therefore consumed in looking up places no longer in existence or concerning which our information proved to be otherwise erroneous. Again, it should be noted that some of the greatest technical difficulties were encountered in scheduling smaller establishments which, though relatively unimportant, were necessary in a comprehensive study, and in which records were often most miserably kept. In order to obtain exact information, the expenditure of effort frequently was disproportionately great. In estimating the ground covered in the course of the investigation, it is only fair to take account of the fact that much more field work was done than is actually indicated in the returns.

SUMMARY OF OFFICE TABULATION

The following is a brief presentation of the data obtained, and the manner in which use was made of them:

MERCANTILE ESTABLISHMENTS

	New York City	Up-state	Total
Number of firms.....	56	87	143
Number of employees.....	56,151	13,782	69,933
Number of tables made.....	2,678	5,146	7,824

SHIRT FACTORIES

	New York City	Up-state	Total
Number of firms.....	76	36	112
Number of employees.....	7,214	5,842	13,056
Number of tables made.....	735	840	1,575

SUMMARY OF OFFICE TABULATION—*Continued*
PAPER BOX FACTORIES

	New York City	Up-state	Total
Number of firms.....	193	45	238
Number of employees.....	8,650	3,110	11,760
Number of tables made.....	2,082	630	2,712

CONFECTIONERY FACTORIES

	New York City	Up-state	Total
Number of firms.....	61	23	84
Number of employees.....	8,593	1,174	9,767
Number of tables made.....	1,320	401	1,721

TOTAL

	New York City	Up-state	Total
Number of firms.....	386	191	577
Number of employees.....	80,608	23,908	104,516
Number of tables made.....	6,815	7,017	13,832

SCHEDULE OF TABLES

TABLES MADE FROM CARD FORMS Nos. 1 and 2

Card Form No. 1 (Page 5) number obtained..... 87,011
Card Form No. 2 (Page 6) number obtained..... 104,516

The personal information on card No. 1 was first transferred to form No. 2 in order to simplify the tabulation.

ESTABLISHMENT

TABULATED

VERIFIED

TABLE I. SEX AND AGE OF EMPLOYEES

	Total	14-15	16-17	18-20	21-24	25-29	30-34	35-39	40-44	45-54	55-64	65 +	N. R.
Male.....													
Female.....													
Total....													

Table I shows the distribution of the employees according to age and sex. The age groups up to 21 years were fixed in accordance with the various provisions of the Labor Law of New York State concerning the employment of certain classes of minors.

In this table and those following, under "N. R." (not reported) are included all those employees for whom the particular information was not obtained. These cards are included in the tables for the purpose of checking results.

Table II. This form shows the distribution of employees according to nativity and sex, for children 14 and 15 years of age, minors from 16 to 20, and adults. For those of foreign birth the different countries are shown.

Table III. This form shows the distribution of employees by sex according to age groups and conjugal condition.

Table IV. This form shows the distribution of employees according to age groups and sex in the main occupations of the industry. For the sake of speed and accuracy in tabulation each card was numbered with a code number in red showing the occupation group to which it belonged. This was made necessary by the fact that so many different names are given to one occupation. For instance in the manufacture of paper boxes, stripping, topping, bottoming, top labeling, labeling, running, etc., are all forms of covering.

Table V. This form shows the distribution, by sex, of employees of native and foreign birth in the various occupations.

Table VII. This form shows the age distribution by sex of all employees according to the number of years worked for wages. The grouping of years, beginning with under one year, is by separate years up to ten, above ten it is by five-year groups.

ESTABLISHMENT

TABULATED

VERIFIED

TABLE II--NATIVITY OF EMPLOYERS BY AGE AND SEX

MALE

Total

FEMALE

NATIVITY

Age

Total N. R. Native Foreign

14-15

16-20

21+

N. R.

Total

ESTABLISHMENT

TABULATED

VERIFIED

TABLE III—CONJUGAL CONDITION BY AGE AND SEX

A. MALE						B. FEMALE							
AGE	CONJUGAL CONDITION					AGE	CONJUGAL CONDITION						
	Single	Married	Widowed	Divorced	N. R.		Total	Single	Married	Widowed	Divorced	N. R.	Total
14-15.....							14-15.....						
16-17.....							16-17.....						
18-20.....							18-20.....						
21-24.....							21-24.....						
25-29.....							25-29.....						
30-34.....							30-34.....						
35-39.....							35-39.....						
40-44.....							40-44.....						
45-54.....							45-54.....						
55-64.....							55-64.....						
65+.....							65+.....						
N. R.....							N. R.....						
Total..							Total..						

[illegible]

Table XI. This form shows the number of days worked by each employee during the week for which wage data were secured.

Table XII. This form shows, according to certain age groups, the number of hours worked by each employee during the week for which wage data were obtained. Because of the hour and age grouping this table shows automatically any illegal overtime for children under 16, boys from 16 to 17, and all women.

Table XIII. This is a table of overtime work during the week for which data were obtained by the Commission. For children, boys from 16 to 17, and all women, overtime was taken to mean illegal overtime. In the case of adult men overtime was used to mean merely any time worked in excess of the hours given as the regular working time for that individual.

Table XIV. This form was used to show the age distribution of all employees by sex according to weekly rates and actual weekly earnings. The age groups are the same as in the previous age tables. The wage distribution beginning with under \$3 a week is given in \$0.50 intervals to \$8, \$1 intervals to \$16, \$2 intervals to \$20, \$5 intervals to \$40. All employees earning \$40 or more a week are grouped, as in any case this is an exceedingly small number. The smaller intervals were given in the lower wage groups for two reasons. First, because the earnings of the majority of the employees in at least 3 of the 4 industries investigated fall below \$8 a week, and second, because with so small a weekly sum \$0.50 is of great importance to the individual. Above \$8 the grouping is as close as convenience in tabulation would permit.

Table XV. This form was used for all tables showing weekly rates and earnings except the two age tables for which Table XIV was used.

The wage grouping is the same as in Form XIV.

The actual earnings of all employees were tabulated by nativity, by conjugal condition, by the number of years employed in the trade, by the number of years employed by the firm and by occupation groups.

Using the same wage distribution, rates were also tabulated according to occupation groups.

In the case of the material from up-state, where a slightly different form of card was used, five additional tables covering living conditions, were made for each firm.

ESTABLISHMENT

TABULATED

VERIFIED

TABLE X—SUMMARY OF TABLES VII, VIII AND IX

ESTABLISHMENT

TABULATED.

VERIFIED.

TABLE XI.—DAYS WORKED IN PAYROLL PERIOD

[illegible]

TABLE XII. HOURS WORKED PER WEEK

[illegible][illegible]**TABLE XIII—HOURS WORKED OVERTIME**[illegible]

INTEGRITY

TABULATED

DELETED

TABLE XIV. WEEKLY RATES (OR EARNINGS) IN DOLLARS

Male

[illegible]

B. Power

[illegible]

LIVING CONDITIONS*

Table I. This form shows the actual weekly earnings of all unmarried persons according to whether or not they paid board.

Table II. This form shows home relations for children, young persons, adults, that is, whether they are living with parents, relatives or strangers.

Table III. This form shows their home relations according to actual weekly earnings.

Table IV. This form shows marital condition according to type of domicile, that is, whether the single, married, etc., persons live in private houses, apartments, furnished rooms or hotels.

Table V. This form shows the type of domicile of all married persons according to their actual weekly earnings.

The material for each firm was tabulated separately except in the case of very small establishments which were grouped according to type and locality. For each New York City firm seventeen tables were made, for each up-state firm twenty-two tables. These individual tables have been used for purposes of comparison only. The tables appearing in the report are all combination tables.

The Manhattan establishments for the four industries investigated in New York City were kept apart in the first combination tables from the establishments in the other boroughs. This was done because of the different conditions in Manhattan, such as higher overhead charges. Different lines in the same industry were also held apart in the first combination tables either because they were essentially different or because they showed different wage levels. Thus in mercantile establishments the department stores, neighborhood stores and five and ten cent stores were kept apart throughout. In the men's shirt industry two kinds of factories were distinguished, those manufacturing working shirts, and those manufacturing negligee and dress shirts. In the candy industry, wholesale establishments were kept apart from those having a retail outlet and the smaller groups of factories such as those manufacturing popcorn, chewing gum and chocolate were also distinguished. These divisions were finally put together for Greater New York. In the case of mercantile establishments the five divisions within each class — stock and sales, office, shipping,

* See cards Nos. 1 and 2, and description, pages, 5, 6.

ESTABLISHMENT

TABULATED

VERIFIED

TABLE II.—AGE AND HOME RELATIONS

AGE	HOME RELATIONS					
	Parents	Relative	Friends	Strangers	Alone	Total
<i>Male</i>						
Under 16.....						
16-20.....						
21 and over.....						
Not reported.....						
Total.....						

Female

ESTABLISHMENT

TABULATED.

VERIFIED.

TABLE III.—HOME RELATIONS AND EARNINGS

[illegible]

ESTABLISHMENT
 TABULATED
 VERIFIED
 TABLE IV.—DWELLING AND CONJUGAL CONDITION

DWELLING	CONJUGAL CONDITION				
	Single	Married	Widowed	Divorced	Not reported
Male					
Private house.....					
Apartment.....					
Furnished room.....					
Boarding house.....					
Hotel or "home".....					
Not reported.....					
Total.....					
Female					
Private house.....					
Apartment.....					
Furnished room.....					
Boarding house.....					
Hotel or "home".....					
Not reported.....					
Total.....					

[illegible]

manufacturing and plant — were also kept separate. In the three other industries the factory workers only were tabulated by firms. The clerical, plant and shipping force were tabulated for each industry as a whole.

The up-state material for each industry was combined by first and second class cities, by third class cities as a group and by towns as a group. Each industry was finally combined for the entire state.

Card No. 3, page 7.— Number obtained, 500.

The material on Card No. 3 was used principally to supplement the occupation material on Card No. 1 and to assist in the classification of occupations. In the men's shirt and paper-box industries, piece rates were listed from these cards.

Card No. 4, page 9.— Number obtained, 500.

Table I. A table showing the regular working hours per week in each department for men, for women and for children 14 and 15 years of age.

Table II. A table showing the regular hours per day in each department for men, women and children.

Table III. For those establishments having one short day in the week, a table showing the length of that day for each class of workers.

Table IV. A table showing the length of the regular lunch period for men, women and children.

For those establishments having a different schedule in different seasons, separate tables were made for each season.

Card No. 5, page 10.— Number obtained, 6,172.

Before tabulation the amount of wages for the entire year was added and divided by the number of weeks worked in order to get the average weekly earnings.

Table I. A table showing the average weekly earnings according to the number of weeks worked. The wage distribution is the same as in the wage tables from Card No. 2. The week distribution beginning with less than one week is by four-week intervals to fifty-two weeks.*

* See Table XXI, Mercantile Establishments, page 97, and Table Series XIX of the Statistical Appendix, Volume III of this report.

Table II. A table showing the distribution by actual annual earnings according to occupation and sex. In this table only those employees who had worked forty-three weeks or more, were included.*

Table III. A table showing the average weekly earnings for all employees, by occupation and sex.

Table IV. A table showing the distribution of all employees by occupation and sex according to annual earnings computed for fifty-two weeks from the final rate specified.

Table V. A table showing the distribution of all employees by occupation and sex according to annual earnings computed for fifty-two weeks from the average weekly earnings.

Table VI. This table was made for final combination tables only. For each occupation group, it gives a comparison of actual weekly earnings and average weekly earnings by percentages.

Card No. 6, page 11.— Number obtained, 500.

No regular tables were made from this form. The number of employees and the amount of wages paid in each week were listed for all the firms, for which this card was obtained, in each industry. The charts show for one year by weeks, the fluctuation in the number of workers employed and in amount of wages paid.

Card No. 7, page 12.— Number obtained, 6,900.

Table I. A table showing the number of weeks worked during the year for each employee, by the rate specified at the close of the period.

Table II. A table showing the amount of increase or decrease in wage rate during the period of time worked for each employee by the rate specified at the beginning of the period.

Card No. 8, page 13.— Number obtained, 2,050.

Table I.—A table showing the number of years worked for wages by the number of trades engaged in.

Table II. A table showing the number of years worked for wages by the number of jobs held.

Table III. A table showing the number of years worked in the present trade by the lines of work followed in the trade.

* See Table Series XX, of the Statistical Appendix.

Table IV. A table showing the amount of time lost during one year for industrial and personal reasons.

Table V. A table showing vacations and holidays for one year and whether they were paid or taken at the worker's expense.

Table VI. A table showing seasonal variations in earnings.

In some cases, where the material permitted, other tables were made. For mercantile establishments, a table showing commissions and premiums, a table showing the average amount of sales and a table showing regular working hours during the Christmas season.

Card No. 9, page 14.— Number obtained, 2,050.

The tabulation of these cards was begun in this office, but was later turned over to Dr. Streightoff. A description of the use of this material will be found in the report on the standard of living.

Card No. 11, page 15.— Number obtained, 2,200.

Table I. A table showing the weekly wage of the principal wage earner according to his occupation and business.

Table II. A table showing the occupation and business of the principal wage earner according to the causes of dependency of the family.

In each case separate tables are made for those families in which the principal wage earner is a woman.

In addition to the regular tabulation certain special studies were made of:

1. Piece rates in shirt factories, according to weekly output, hourly output, and rates per hour.
2. Extra help in mercantile establishments according to time worked per week and rate of wages.
3. Home workers for shirt factories.
4. Tables of number of years worked in the trade and actual weekly earnings for two skilled occupations in each industry.

As was to be expected, the material obtained was not always complete or satisfactory. The personal card (form No. 1) was in many cases incompletely filled out. In mercantile establishments particularly, many women, in answer to the question of age, reported simply "over 21." It is probable also that in

some cases where the exact age was stated it was not given correctly. The age as given, however, can be taken to indicate at least the lower limit.

The greatest difficulty was experienced in obtaining exact occupations. In the case of stores, "clerk" was frequently entered and without further information it was impossible to say whether it meant stock clerk, sales clerk, shipping clerk, or office clerk. In the confectionery industry, "helper" was so frequently given that it was necessary to classify this as a separate occupation. In one instance the occupation was given as "Mr. _____'s assistant." As Mr. _____'s card was not among those returned, the occupation of his assistant remained somewhat doubtful. In a gum factory, "chocolate dipper" was given by one employee as her occupation. Upon inquiry it was discovered that this woman in the slack season had taken an inferior position in a gum factory, but was actually a chocolate dipper by trade. In a correlation of wages and occupations it is of course necessary to get the exact nature of the occupation for which the wage recorded was paid. This difficulty in obtaining information about the occupations of each employee frequently made it necessary to make repeated visits to the same establishment in order to verify the material.

Owing to the incomplete payrolls it was not always possible in the establishments of inferior grade to obtain data in regard to wages or employees for the previous twelve months. In the majority of cases, however, data regarding total wages paid and number of workers employed were obtained for each week for an entire year.

In the case of all establishments, on the completion of the tabulation, members of the firm were given an opportunity to inspect and criticise the tables made for their individual firms.

II. MERCANTILE ESTABLISHMENTS

I. WAGES IN RETAIL STORES

COLLECTION OF DATA

Early in December, 1913, the investigation of department stores in New York City was begun. Our purpose was to study these establishments when the number of their employees was greatest. Because of objections raised by some of the merchants to the collection of personal information at that time, most of the inquiry was postponed until after the holidays. But it was thought better to take the payroll for a week preceding Christmas, even though many of the people concerned had subsequently left, than to lose all the facts regarding the payment of this shifting force. This explains why many store employees in New York City are not classified otherwise than by weekly rates and earnings.

It should also be noted that immediately after the wage data had been taken from the books of two large stores, the firm that owned them went into bankruptcy. It was therefore impossible to secure the personal facts concerning the employees, because the greater part of the force was dismissed and the receivers could not give us access to their records.

Owing to the suspension of field work while the Legislature was considering the continuation of the Commission, the collection of wage data up-state was not done until May and June, 1914. These differences in dates should be borne in mind when comparing the earnings of persons in New York City and elsewhere in the State. In case of the former, business was at its height, but in other places trade was beginning to slacken with the approaching summer, and so the earnings would naturally be lower, especially where piece rates or commissions were involved. It is unfortunate that all the data could not have been taken at the same time; but this difference may give some idea of fluctuation of income with the changing seasons.

DISTRIBUTION OF STORES

Despite these vicissitudes, we obtained wage data for nearly 70,000 employees in 143 stores located in 19 cities and villages throughout the State, distributed as follows:

PLACE	Stores	Employees
New York City.....	56	56,151
Buffalo.....	19	4,922
Rochester.....	7	2,872
Syracuse.....	9	1,597
Albany.....	4	960
Utica.....	8	852
Troy.....	7	822
Schenectady.....	7	610
11 third-class cities and villages.....	26	1,147
All places.....	143	69,933

These stores vary in size from small 5 and 10 cent shops, with 10 or 15 clerks, to the huge metropolitan establishments with 4,000 or 5,000 employees. In order to compare all these more justly, we have distinguished the large downtown department stores, the smaller neighborhood shops with their more limited local trade, and the 5 and 10 cent stores with their peculiar economy and stock-in-trade. Specialty shops have not been considered. True, the neighborhood store in a busy uptown shopping center approaches very closely to the downtown store in a smaller place. So we have not attempted to make this distinction save in New York City and Buffalo. The number of stores of each class included in this survey is shown below.

Department stores	Neighborhood stores	Five and ten cent stores
70	31	42

FUNCTIONAL DIVISIONS

A big store is a complex piece of business organization, as Mr. Baron's account hereafter set forth, will make clear. In order to study such establishments thoroughly, we have been obliged to divide them into different sections, according to the principal function performed by each. Thus we have distinguished the stock and sales division, the office, the delivery force, the manufacturing and repair shops, and finally the general plant help, such as watchmen, janitors and engineers. These must be dealt with in some detail in order to bring out differences in conditions of work and wages. For purposes of comparison, we here present the numbers involved and the proportion of persons in each division of the different classes of stores.

TABLE I *
DISTRIBUTION OF EMPLOYEES BY KIND OF WORK AND TYPE OF STORE

DIVISION	DEPARTMENT		NEIGHBORHOOD		FIVE AND TEN CENT		ALL STORES	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Stock and sales.....	32,986	51	2,340	66	1,523	85	36,849	53
Office.....	9,987	15	474	13	93	5	10,554	15
Delivery.....	6,754	10	290	8	13	1	7,057	10
Work shop.....	5,325	8	101	3	.....	.....	5,426	8
Plant.....	5,742	9	183	5	52	3	5,977	9
Unclassified.....	3,803	6	160	5	107	6	4,070	6
Total.....	64,597	100	3,548	100	1,788	100	69,933	100
Per cent of all.....	92%		5%		3%		100%	

* Except as otherwise specified, the figures in all the tables are for establishments investigated throughout the state.

PERSONNEL
SEX

Out of 57,359 persons recorded by sex, 33,732 (nearly 59%) are women and girls. The proportion of the sexes varies greatly in different places. Thus in New York City there are 7 males to every 9 females employed in the stores; but in the smaller towns the ratio is only 3 to 9. The up-state cities in general show fewer men in mercantile establishments. Here at once appears a reason for differences in wages, for as a rule women are paid less than men. Consequently a large proportion of female help usually means a low salary level for the business as a whole.

The character of the stores also affects the relative numbers of men and women employed. Thus the following table shows that large department and neighborhood stores have a much higher ratio of male help than do five and ten cent establishments.

TABLE II
DISTRIBUTION OF EMPLOYEES BY SEX AND CHARACTER OF STORES

CLASS OF STORES	MALE		FEMALE		BOTH	
	Number	Per cent	Number	Per cent	Number	Per cent
Department stores.....	22,296	42.5	30,179	57.5	52,475	100
Neighborhood stores.....	1,070	33.7	2,106	66.3	3,176	100
5 and 10 cent stores.....	261	15.3	1,447	84.7	1,708	100
All stores.....	23,627	41.2	33,732	58.8	57,359	100

We have already remarked that the department stores of the smaller towns are practically indistinguishable from the neighborhood stores of large cities. So that the predominance of women in mercantile establishments up-state is partly explained by the comparative ease and convenience of getting to and from work.

The reason for variation in the proportion of male and female help is still more apparent when we compare the relative numbers in different divisions of the business. Thus, the next table shows the distribution by sex of those engaged in sales and stock rooms, in offices, in the delivery of goods, in work shops, and in the care of the plant.

TABLE III
DISTRIBUTION OF EMPLOYEES BY SEX AND KIND OF WORK

DIVISION	MALE		FEMALE		BOTH	
	Number	Per cent	Number	Per cent	Number	Per cent
Stock and sales.....	8,967	28.6	22,328	71.4	31,295	100
Office.....	2,684	28.7	6,662	71.3	9,346	100
Delivery.....	6,412	98.4	106	1.6	6,518	100
Shops.....	1,534	34.9	2,858	65.1	4,392	100
Plant.....	3,984	70.	1,716	30.	5,700	100
All divisions.....	23,581	41.2	33,670	58.8	57,251	100

As might be expected, comparatively few women are employed in shipping goods and in caring for the plant. In the shops also the proportion of men is relatively large. But we have just seen that these last three divisions are not very important in the smaller stores. It is clear, therefore, that the number and character of establishments chosen for enumeration has a marked effect upon the proportion of male and female help enumerated, and so upon the general level of wages found. On the whole, we have selected the most important stores in each place, and so have taken the most favorable basis for comparison.

AGE

Turning now to the distribution of employees according to age, we find similar variations. The following table shows the proportion of persons by sex in each age group.*

* For detailed tables the reader is referred to the statistical appendix contained in volume III of this report, where important points are analysed in tables showing correlations for various cities. It was thought best not to overload the descriptive summary with many figures which might interest only a few persons.

TABLE IV
NUMBER AND PER CENT OF EMPLOYEES BY AGE GROUPS AND SEX

Sex	CHILDREN UNDER 16 YEARS		YOUNG PERSONS 16-20 YEARS		ADULTS 21 YEARS AND OVER		ALL AGES	
	Number	Per cent of sex	Number	Per cent of sex	Number	Per cent of sex	Number	Per cent of sex
Male.....	678	3.3	3,587	17.4	16,320	79.3	20,585	100
Female.....	1,504	5.	10,718	35	18,304	60	30,526	100
		Per cent of total		Per cent of total		Per cent of total		Per cent of total
Both sexes.....	2,182	4.2	14,305	28	34,624	67.8	51,111	100

It is clear from this presentation that the number of young women and girls in stores is much greater than that for males of similar age. Two-fifths of all females are under 21, whereas only one-fifth of the males are minors. Conversely the proportion of adult men is higher. Nearly one-third of all persons reported by age were under 21 years.

But these proportions differ considerably from place to place. Thus the number of young persons in stores is relatively, as well as absolutely, smaller in third class cities than in larger towns.* The age groups vary in comparative weight also in different classes of establishments, as shown herewith.

TABLE V
DISTRIBUTION BY AGE AND SEX ACCORDING TO CHARACTER OF STORES

Age Group	Sex	DEPARTMENT STORES		NEIGHBORHOOD STORES		5 AND 10 CENT STORES	
		Number	Per cent of all ages	Number	Per cent of all ages	Number	Per cent of all ages
Children under 16 years.....	Male....	645	3	22	2	11	4
	Female..	1,473	5	22	1	9	1
	Both....	2,118	5	44	1	20	1
Young persons 16- 20 years.....	Male....	3,291	17	219	23	77	31
	Female..	8,845	33	964	47	909	65
	Both....	12,136	26	1,183	39	986	60
Adults 21 years and over.....	Male....	15,436	80	724	75	160	65
	Female..	16,744	62	1,076	52	484	34
	Both....	32,180	69	1,800	60	644	39

* See Statistical Appendix, Table 1.

This table makes it clear that the larger stores employ many more children (especially girls) and older persons (especially men) than smaller establishments. On the other hand, the five and ten cent stores are remarkable for the large proportion of young persons engaged, over half the force being composed of young women between 16 and 21 years of age. Neighborhood stores appear to stand between the other two in all respects.

Such differences in age have their effects upon wages, because maturity and experience are usually considered in estimating the value of an employee's services. If, therefore, one group of stores can use young, untrained girls, whereas another must employ many mature men and women, we should expect the latter to pay higher. This we shall find to be the case.

The relation between age and wage appears more clearly when we consider the kind of persons engaged in the various occupations in a retail store. For instance, we know that superintendents and buyers are usually persons of mature years, whereas messengers and stock hands are, as a rule, mere youngsters. On the other hand, salespeople may be almost any age, from the little girl who hands out papers of pins, to the elderly gentleman who advises on the selection of Persian rugs. In the same way, bookkeepers and clerks in the office vary widely in age; but stenographers and telephone operators, cashiers and auditors, are generally very young women. So in the delivery force, the wagon helpers are much younger than the run of drivers and packers. Craftsmen, mechanics and janitorial helpers are usually persons in middle life.

The following table shows the distribution by age groups in the various divisions of store service:

TABLE VI
DISTRIBUTION BY AGE AND SEX ACCORDING TO KIND OF WORK

Age Group	Sex	STOCK AND SALES		OFFICE		DELIVERY		SHOPS		PLANT	
		Number	Percent of all ages	Number	Percent of all ages	Number	Percent of all ages	Number	Percent of all ages	Number	Percent of all ages
Children under 16 years.	Male.....	473	5.6	116	4.5	81	1.7	5	.4	3	.....
	Female.....	1,227	6.1	262	4.	.....	.....	8	.3	7	.5
	Both.....	1,700	5.9	378	4.2	81	1.7	13	.3	10	.2
Young persons, 16-20 years.....	Male.....	1,458	17.4	612	24	1,210	25.8	63	4.6	244	7.
	Female.....	6,918	34.5	3,235	51	27	45.7	370	15.2	168	10.7
	Both.....	8,376	29.3	3,847	43	1,237	26	433	11.3	412	8.1
Adults, 21 years and over	Male.....	6,511	77.	1,831	71.5	3,397	72.5	1,316	95.	3,265	93.
	Female.....	11,965	59.4	2,856	45.	32	54.3	2,063	84.5	1,388	83.8
	Both.....	18,476	64.8	4,687	52.6	3,429	72.3	3,379	88.4	4,653	91.7
All ages.....	Male.....	8,442	100	2,559	100	4,688	100	1,384	100	3,512	100
	Female.....	20,110	100	6,353	100	59	100	2,441	100	1,563	100
	Both.....	28,552	100	8,912	100	4,747	100	3,825	100	5,057	100

It is clear from these figures that the stock, sales and office divisions employ most of the children (especially girls) as messengers, and a few boys are used on the wagons. The great mass of young women are salespersons, office clerks and cashiers, while the men are mostly salespeople, delivery hands and janitorial help.

In general, any department that uses many young persons will show a lower level of wages than one that requires older heads; and the relative numbers of adult and minor workers will in large measure determine the mean scale of payment in any establishment. Although this may appear perfectly obvious, the principle should not be forgotten in studying the following comparisons between wages in different occupations. The reader must always consider whether we are comparing the same kind of persons. If not, a difference in efficiency may be granted as an explanation of variation in rates of pay.

NATIVITY

Birth and parentage also influence wages. Ability to speak good English or to sell to foreign customers is an important qualification in many stores. Besides, the traditional standards of comfort vary among different nations, and their representatives can use the same wages in diverse manners of living.

Fifty-two thousand and ten persons in the stores were recorded according to nativity. Of these, 10,374 (nearly one-fifth of all) were reported as foreign born. Almost every western nation is represented. English speaking people predominate among the immigrants, constituting 55% of the whole number. The Irish are the most numerous (30%), followed in order by Germans (12.4%), English (11.7%), Russians (8.5%), and Canadians (7.4%). Italians (6.6%), Austro-Hungarians (6.3%), and natives of the West Indies (1.4%) are found mostly among the plant help.

Of course these proportions reflect somewhat the general composition of the local population, and the totals vary according to the number of persons scheduled in each place. Thus New York City, where foreigners are most numerous, furnished nearly three-fourths of the data. Here 22% of all employees are immigrants. In Albany, Troy and the smaller cities, however, only 7% of store hands are of foreign birth.*

* See Statistical Appendix, Table 2, for distribution according to locality.

The following table shows the distribution of persons for whom age and sex, as well as nativity, were recorded.

TABLE VII
DISTRIBUTION BY AGE AND SEX ACCORDING TO NATIVITY

AGE GROUP	Sex	NATIVE		FOREIGN	
		Number	Per cent of all ages	Number	Per cent of all ages
Children under 16 years.....	Male.....	608	4.	62	1.
	Female...	1,356	5.	139	3.7
	Both.....	1,964	4.8	201	2.
Young persons, 16-20 years.....	Male.....	3,079	22.	490	7.6
	Female...	9,710	36.5	940	24.8
	Both.....	12,789	31.5	1,430	14.
Adults, 21 years and over.....	Male.....	10,339	74.	5,908	91.5
	Female...	15,508	58.5	2,711	71.5
	Both.....	25,847	63.7	8,619	84.
All ages.....	Male.....	14,026	100	6,460	100
	Female...	26,574	100	3,790	100
	Both.....	40,600	100	10,250	100

It is noteworthy that whereas nearly two-thirds of the natives are females, among the foreign born women and girls constitute only three-eighths of the whole number. The proportion of adults of both sexes among immigrants is much greater than among our own country people. Still we see a considerable influx of young foreign girls into the stores. The men, however, predominate.

The distribution of foreign-born employees among the various divisions in the different classes of stores is shown in the following table:

TABLE VIII
DISTRIBUTION OF FOREIGN BORN ACCORDING TO CLASS OF STORE AND KIND OF WORK

DIVISIONS	DEPARTMENT STORES		NEIGHBORHOOD STORES		5- AND 10-CENT STORES		ALL STORES	
	Male	Female.	Male	Female	Male	Female	Male	Female
Stock and sales....	2,190	1,897	191	187	26	111	2,407	2,195
Office.....	424	485	20	30	2	2	446	517
Delivery.....	940	6	30	.....	.....	.....	970	6
Shops.....	716	572	19	10	.....	.....	735	582
Plant.....	1,884	573	44	8	11	6	1,939	587
All divisions.....	6,054	3,533	304	235	39	119	6,797	3,887

This presentation makes it plain that the greatest number of newcomers are in the stock and sales divisions of the large stores. Next to these come the caretakers of the same class of establishments. Later on, we shall analyze their occupations more exhaustively. Here it is sufficient to indicate the general lines in which they are engaged.

CONJUGAL CONDITION

Nearly three-quarters of all store employees are unmarried. The youth of so many partly explains this fact. Among the women especially, married persons are comparatively rare—one in seventeen. They appear to be less numerous than widows, although the latter group may contain some divorcees and women abandoned by their husbands. The men more nearly approach the proportions of married and single in the general population. The following table shows, however, that the stores are manned principally by single people. Nevertheless, nearly half the men and over one-fourth of all persons may be assumed to have some responsibility toward the support of others.

TABLE IX
CONJUGAL CONDITION BY SEX

CONJUGAL CONDITION	MALE		FEMALE		BOTH	
	Number	Per cent	Number	Per cent	Number	Per cent
Single.....	10,566	52.2	27,023	87.3	37,589	73.4
Married.....	9,074	44.8	1,815	5.9	10,889	21.3
Widowed.....	555	2.7	1,996	6.4	2,551	5.0
Divorced.....	39	.2	130	.4	169	.3
Total.....	20,234	100	30,964	100	51,198	100

These proportions vary with different classes of establishments. For instance, the ratio of single persons is much higher in 5 and 10 cent stores, especially among women. This means that girls who live at home can get along on wages that would scarcely support them independently and which would not enable them to sustain other persons.

OCCUPATIONS

The various occupations embraced in the business of a great department store are almost as numerous as the kinds of goods sold. The mere enumeration of all the vocations discovered in connection with this survey would fill a small pamphlet. We have already indicated the main divisions of the force, and the statistical appendix contains a series of tables giving the principal occupations under each head.*

For purposes of convenience we herewith present a condensed list of the more important classes of workers, referring the reader to the preceding analysis of store organization for a description of their respective functions. Most of the terms are self-explanatory, the purpose being merely to designate the occupation rather than to define it accurately. Obviously some groups, as "shop hands" and "mechanics" embrace scores of specialized lines. Our idea here is to show the kind of people engaged in retail mercantile establishments, without attempting an exhaustive classification.

The careful reader will also notice that some of the figures given in this part of the report do not agree exactly with those presented in the complete distribution tables, nor do all the totals check. The reason for these discrepancies is that we here wish to emphasize the main outstanding facts. Doubtful cases and those incompletely recorded are not included in these totals. The statistical investigator will therefore wish to study the final tables. With this explanation we may now consider the number and character of the workers as presented in the accompanying schedule.

* See Statistical Appendix, Tables VII.A-IX A

TABLE X
DISTRIBUTION OF EMPLOYEES BY OCCUPATION ACCORDING TO AGE AND NATIVITY

OCCUPATIONS	NUMBERS			AGE OF MAJORITY		NATIVITY			
	Total	Male	Fe-male	Male	Fe-male	Native		Foreign	
						Male	Fe-male	Male	Fe-male
1. Superintendent and buyers....	379	286	93	30-55	25-40	209	80	75	11
2. Assistant buyers and floor managers.....	1,676	1,046	630	30-55	25-40	777	559	260	67
3. Salespeople.....	20,351	4,594	15,757	25-45	18-30	3,102	13,934	1,464	1,723
4. Stock hands.....	3,402	1,687	1,715	18-40	16-20	1,237	1,562	432	145
5. Messengers.....	3,957	1,142	2,815	14-20	14-18	939	2,534	195	254
6. Confidential and advertising help.....	396	319	77	18-40	21-35	247	65	69	10
7. Bookkeepers....	879	265	614	21-40	18-30	211	568	52	41
8. Clerks and cashiers.....	5,956	1,687	4,269	21-40	18-25	1,385	3,884	293	346
9. Stenographers and telephone operators.....	829	35	794	18-25	18-25	34	718	1	70
10. Auditors.....	732	67	665	18-35	16-25	54	613	13	47
11. Packers and shippers.....	1,493	1,436	57	21-45	16-25	1,010	53	416	4
12. Drivers and chauffeurs.....	1,449	1,449	.....	21-40	.....	1,275	.....	167	.....
13. Wagon boys.....	1,351	1,351	.....	16-25	.....	1,211	.....	128	.....
14. Stablemen.....	320	320	.....	30-55	.....	92	.....	228	.....
15. Shop hands.....	3,992	1,397	2,595	25-55	21-40	655	1,989	735	582
16. Foremen and forewomen....	140	137	3	30-55	30-45	105	2	30	1
17. Mechanics.....	825	825	.....	25-45	.....	481	.....	342	.....
18. Janitorial force..	2,442	2,135	307	25-55	30-55	917	161	1,204	145
19. Personal service..	1,726	466	1,260	21-40	21-40	113	809	348	441
20. General labor....	125	125	.....	21-45	.....	80	.....	45	.....
All occupations.....	52,420	20,769	31,651	21-45	18-30	14,134	27,531	6,497	3,885

Under the column of occupations we have combined similar lines of work when they are performed by persons of about the same age and are paid at rates that do not usually differ greatly. Thus No. 2 includes besides assistant buyers, heads of stock and floor managers. Number 5 includes cash girls, errand boys and bundle wrappers. The last group is, of course, more skilled than ordinary messengers. Number 6 comprises secretaries, advertising agents and detectives. Number 19 is used to designate attendants, waitresses, manicurists, nurses and all who perform similar functions.

Upon inspection of the table, one can readily see the numerical importance of the several occupations, the preponderance of male or female employees, the age limits of the majority of each sex,* and the nativity of all whose birthplace was given. Few words are necessary to explain the figures.

We may call attention to the great numbers of salespeople, clerks, shop hands, messengers and janitors. The last group and the people engaged in manufacture are often overlooked in considering mercantile economy. In most lines, except general administration, delivery and janitor service, female employees preponderate. Notice should also be taken of the large number of girls employed as auditors, and of women who serve as kitchen help.

The age classification appears to be obvious. As to nativity, we need only remark the preponderance of foreign men in the rougher work of stable, shop and plant service. The total for each column is given to aid comparison. As stated before, cases not recorded according to these classifications have been eliminated.

Of course, this is a conspectus of the entire State. The number and character of employees vary from place to place and from store to store. As already indicated, five and ten cent stores have no shops, a small shipping force and comparatively few office clerks. The smaller department stores also fall below their huge competitors in these respects as well as in their proportion of plant help. So it must be remembered that we are here dealing with a group of people in which the personnel of the large New York City stores outweighs all the other elements.

RATES

The accompanying table shows the weekly rates of payment quoted for 69,145 persons in stores throughout the State. Nearly 52,000 were designated by sex and occupation; for the others these items were doubtful or lacking. For a fuller analysis by locality, class of establishment and division, the reader is referred to the appended tables. Several points, apparent from the figures given may here be emphasized.

* The limits of the middle 50 per cent of each occupation group were taken, thus eliminating the extremes of youth and age. These limits are known statistically as the first and third quartiles.

APPENDIX IV—WAGE INVESTIGATION

TABLE XI.
WEEKLY RATES BY OCCUPATION AND SEX

WEEKLY RATES IN DOLLARS	SUPERINTENDENTS AND BUYERS		ASSISTANT BUYERS AND FLOOR MANAGERS		SALESPeOPLE		STOCK HANDS		MESSENGERS		CONFIDENTIAL CLERKS		WEEKLY RATES IN DOLLARS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
All rates.....	286	93	1,040	629	4,533	15,716	1,684	1,713	1,137	2,813	317	76	.....All rates
Less than \$3 00.	.....	.....	.....	.....	.....	4	2	3	4	39	.....	.....	Less than \$3 00
\$3 00-\$3 49.....	.....	.....	.....	.....	1	23	3	39	53	315	.....	.....	...\$3 00- 3 49
3 50- 3 99.....	.....	.....	.....	.....	1	60	11	151	72	576	.....	.....	....3 50- 3 99
4 00- 4 49.....	.....	.....	.....	.....	11	271	56	227	332	923	.....	.....	....4 00- 4 49
4 50- 4 99.....	.....	.....	.....	.....	2	443	31	165	76	251	.....	.....	....4 50- 4 99
5 00- 5 49.....	.....	.....	.....	2	16	1,011	125	358	175	322	13	.....	....5 00- 5 49
5 50- 5 99.....	.....	.....	.....	1	2	360	8	46	27	42	1	.....	....5 50- 5 99
6 00- 6 49.....	.....	.....	.....	13	51	2,434	186	243	98	153	13	3	....6 00- 6 49
6 50- 6 99.....	.....	.....	.....	2	6	271	8	21	11	53	1	1	....6 50- 6 99
7 00- 7 49.....	.....	.....	.....	20	61	2,558	142	143	79	60	15	3	....7 00- 7 49
7 50- 7 99.....	.....	.....	.....	7	4	182	9	16	5	16	.....	.....	....7 50- 7 99
8 00- 8 99.....	.....	2	3	31	108	2,381	137	93	94	47	15	3	....8 00- 8 99
9 00- 9 99.....	.....	.....	4	63	104	1,396	91	69	38	5	9	2	....9 00- 9 99
10 00-10 99.....	3	6	15	60	268	1,361	180	43	37	4	13	8	...10 00-10 99
11 00-11 99.....	.....	2	12	38	92	441	88	29	4	2	2	2	...11 00-11 99
12 00-12 99.....	9	5	27	67	580	972	249	28	19	2	14	11	...12 00-12 99
13 00-13 99.....	2	3	11	20	134	198	60	10	3	1	4	2	...13 00-13 99
14 00-14 99.....	4	7	23	40	412	314	93	11	3	2	5	2	...14 00-14 99
15 00-15 99.....	8	9	61	54	729	353	68	5	4	.....	28	2	...15 00-15 99
16 00-17 99.....	13	3	68	42	485	240	58	7	2	.....	18	7	...16 00-17 99
18 00-19 99.....	8	4	119	46	486	182	33	3	1	.....	31	12	...18 00-19 99
20 00-24 99.....	29	10	279	53	634	164	25	3	.....	.....	42	10	...20 00-24 99
25 00-29 99.....	49	12	231	38	218	54	10	.....	.....	.....	31	3	...25 00-29 99
30 00-34 99.....	52	10	102	15	67	19	5	.....	.....	.....	26	3	...30 00-34 99
35 00-39 99.....	21	5	41	11	20	10	4	.....	.....	.....	8	.....	...35 00-39 99
40 00 and over..	88	15	41	6	41	14	2	.....	.....	.....	28	2	.40 00 and over

TABLE XI.
WEEKLY RATES BY OCCUPATION AND SEX (continued)

WEEKLY RATES IN DOLLARS	BOOKKEEPERS		CLERKS AND CASHIERS		STENOGRAPHERS AND 'PHONE OPERATORS		AUDITORS		PACKERS AND SHIPPERS		DRIVERS AND CHAUF- FEURS	WAGON BOYS	WEEKLY RATES IN DOLLARS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Male	
All rates.....	265	613	1,668	4,262	34	793	66	664	1,433	57	1,446	1,347	.....All rates
Less than \$3 00.	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	3	Less than \$3 00
\$3 00-\$3 49.....	.....	1	2	31	.....	1	.....	21	.....	.....	.....	2	...\$3 00- 3 49
3 50- 3 99.....	.....	2	3	107	1	1	.....	52	.....	.....	.....	17	....3 50- 3 99
4 00- 4 49.....	.....	5	40	221	.....	8	.....	78	.....	2	.....	35	....4 00- 4 49
4 50- 4 99.....	.....	1	7	137	.....	8	.....	54	.....	1	.....	22	....4 50- 4 99
5 00- 5 49.....	.....	15	53	458	1	32	1	120	2	8	.....	135	....5 00- 5 49
5 50- 5 99.....	1	3	8	123	.....	14	.....	23	12	.....	1	1	....5 50- 5 99
6 00- 6 49.....	1	35	63	768	.....	119	4	97	16	9	2	103	....6 00- 6 49
6 50- 6 99.....	.....	7	9	114	.....	10	.....	13	4	2	1	4	....6 50- 6 99
7 00- 7 49.....	3	60	51	686	4	123	2	86	41	4	5	88	....7 00- 7 49
7 50- 7 99.....	1	4	7	53	1	5	1	8	5	4	10	199	....7 50- 7 99
8 00- 8 99.....	8	70	77	541	4	126	5	50	48	9	12	315	....8 00- 8 99
9 00- 9 99.....	8	79	64	303	5	84	7	22	46	9	9	142	....9 00- 9 99
10 00-10 99.....	7	98	155	252	6	101	9	13	163	4	51	122	...10 00-10 99
11 00-11 99.....	4	46	56	126	.....	30	3	3	88	2	23	48	...11 00-11 99
12 00-12 99.....	25	73	241	112	2	54	9	8	415	.....	134	90	...12 00-12 99
13 00-13 99.....	12	29	61	47	2	13	3	3	151	.....	110	5	...13 00-13 99
14 00-14 99.....	12	31	113	53	.....	17	2	2	150	1	90	4	...14 00-14 99
15 00-15 99.....	27	28	145	46	4	22	2	4	91	2	638	7	...15 00-15 99
16 00-17 99.....	45	12	99	28	.....	2	3	5	100	.....	289	3	...16 00-17 99
18 00-19 99.....	42	7	105	18	3	12	6	1	52	.....	47	2	...18 00-19 99
20 00-24 99.....	45	4	160	19	1	10	1	.....	30	.....	17	.....	...20 00-24 99
25 00-29 99.....	12	2	64	12	.....	.....	2	.....	7	.....	6	.....	...25 00-29 99
30 00-34 99.....	3	1	41	4	.....	1	3	.....	3	.....	1	.....	...30 00-34 99
35 00-39 99.....	3	.....	17	.....	.....	.....	1	.....	.....	.....	.....	.....	...35 00-39 99
40 00 and over..	6	.....	26	2	.....	.....	2	.....	.....	.....	.....	.....	.40 00 and over

TABLE XI.
WEEKLY RATES BY OCCUPATION AND SEX (continued)

WEEKLY RATES IN DOLLARS	STABLE- MEN		SHOP HANDS		FOREMEN AND FOREWOMEN		MECHAN- ICS		JANITORIAL SERVICE		PERSONAL SERVICE		GENERAL LABOR		WEEKLY RATES IN DOLLARS
	Male		Male	Female	Male	Female	Male		Male	Female	Male	Female	Male		
All rates.....	320	1,266	2,492		137	3	754		2,131	307	462	1,259	123		.....All rates
Less than \$3 00	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	Less than \$3 00
\$3 00-\$3 49...	.....	1	22	.....	.....	.....	.....	.....	.....	.....	1	74	.....	.....	...\$3 00-\$3 49...
3 50-3 99...	.....	1	3	.....	.....	.....	.....	.....	.....	1	1	23	.....	.....	...3 50-3 99...
4 00-4 49...	.....	2	32	.....	.....	.....	1	.....	.....	16	27	231	1	.....	...4 00-4 49...
4 50-4 99...	.....	1	9	.....	.....	.....	.....	.....	2	1	3	81	1	.....	...4 50-4 99...
5 00-5 49...	.....	3	70	.....	.....	.....	3	.....	16	4	51	201	6	.....	...5 00-5 49...
5 50-5 99...	.....	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	16	1	.....	...5 50-5 99...
6 00-6 49...	.....	8	144	.....	.....	.....	5	.....	17	70	42	291	4	.....	...6 00-6 49...
6 50-6 99...	.....	1	10	.....	.....	.....	.....	.....	.....	.....	.....	9	1	.....	...6 50-6 99...
7 00-7 49...	1	15	175	.....	.....	.....	6	.....	16	106	48	149	3	.....	...7 00-7 49...
7 50-7 99...	3	3	63	.....	.....	.....	.....	.....	9	30	.....	9	1	.....	...7 50-7 99...
8 00-8 99...	.....	17	275	.....	.....	.....	3	.....	73	34	32	62	8	.....	...8 00-8 99...
9 00-9 99...	1	14	299	.....	.....	.....	7	.....	119	23	17	25	12	.....	...9 00-9 99...
10 00-10 99...	4	20	314	1	.....	.....	12	.....	447	15	23	26	10	.....	...10 00-10 99...
11 00-11 99...	17	14	116	.....	.....	.....	8	.....	285	1	11	6	7	.....	...11 00-11 99...
12 00-12 99...	81	93	249	.....	2	.....	50	.....	678	2	40	26	40	.....	...12 00-12 99...
13 00-13 99...	50	55	71	.....	3	.....	30	.....	127	.....	12	2	9	.....	...13 00-13 99...
14 00-14 99...	104	113	126	.....	7	.....	43	.....	143	.....	23	8	3	.....	...14 00-14 99...
15 00-15 99...	16	169	120	.....	8	.....	115	.....	98	2	28	8	8	.....	...15 00-15 99...
16 00-17 99...	22	175	89	.....	17	.....	85	.....	52	1	25	4	5	.....	...16 00-17 99...
18 00-19 99...	5	194	68	.....	16	.....	124	.....	20	.....	17	1	1	.....	...18 00-19 99...
20 00-24 99...	8	176	95	.....	32	.....	163	.....	17	1	45	2	2	.....	...20 00-24 99...
25 00-29 99...	2	108	54	.....	20	1	52	.....	4	.....	7	2	.....	.....	...25 00-29 99...
30 00-34 99...	3	33	12	.....	11	.....	34	.....	3	.....	2	.....	.....	.....	...30 00-34 99...
35 00-39 99...	2	20	13	.....	10	.....	5	.....	2	.....	4	.....	.....	.....	...35 00-39 99...
40 00 and over.	1	30	25	.....	9	1	8	.....	2	.....	3	1	.....	.....	...40 00 and over.

TABLE XI.
WEEKLY RATES BY OCCUPATION AND SEX (concluded)

WEEKLY RATES IN DOLLARS	TOTAL NUMBERS			CUMULATIVE PER CENT				WEEKLY RATES IN DOLLARS
	Male	Female	Unclassified	Grand total	Male	Female	Unclassified	Grand total
All rates.....	20,449	31,490	17,206	69,145	.....	.....	.....	.....All rates
Less than \$3 00.....	10	75	14	99	.....	0.24	0.1	0.1
\$3 00-\$3 49.....	63	527	169	759	0.36	1.9	1.1	1.2
3 50- 3 99.....	107	976	279	1,362	0.9	5.	2.7	3.2
4 00- 4 49.....	506	2,014	1,042	3,562	3.4	11.4	8.8	8.4
4 50- 4 99.....	147	1,151	465	1,763	4.1	15.	11.5	10.9
5 00- 5 49.....	607	2,601	953	4,161	7.	23.3	17.1	16.9
5 50- 5 99.....	62	641	215	918	7.4	25.4	18.4	18.3
6 00- 6 49.....	613	4,379	2,165	7,157	10.4	39.3	31.	28.6
6 50- 6 99.....	46	513	117	676	10.6	40.8	31.6	29.6
7 00- 7 49.....	532	4,173	1,912	6,667	13.4	54.1	42.8	39.2
7 50- 7 99.....	259	397	275	931	14.7	55.4	44.5	40.7
8 00- 8 99.....	959	3,724	1,499	6,182	19.4	67.2	53.2	49.6
9 00- 9 99.....	697	2,379	864	3,940	22.8	74.8	58.3	55.3
10 00-10 99.....	1,546	2,306	1,477	5,329	30.4	82.1	66.8	63.
11 00-11 99.....	763	844	545	2,152	34.1	84.9	70.	66.3
12 00-12 99.....	2,798	1,609	1,569	5,976	47.8	90.	79.2	74.7
13 00-13 99.....	844	399	369	1,612	51.9	91.2	81.5	77.1
14 00-14 99.....	1,347	614	467	2,428	58.5	93.2	84.1	80.7
15 00-15 99.....	2,254	655	866	3,775	69.5	95.3	89.2	86.
16 00-17 99.....	1,564	440	511	2,515	77.1	96.7	92.2	89.6
18 00-19 99.....	1,312	354	431	2,097	83.3	97.8	94.7	92.8
20 00-24 99.....	1,706	371	475	2,552	92.	99.	97.5	96.4
25 00-29 99.....	823	178	287	1,288	95.9	99.5	99.3	98.3
30 00-34 99.....	339	65	70	524	97.9	99.7	99.5	99
35 00-39 99.....	158	39	49	246	98.5	99.8	99.7	99.4
40 00 and over.....	287	66	121	474	100.	100.	100	100

Taking up the occupations in order, we note that the majority of male superintendents and buyers receive over \$30 a week. We have records of several whose annual salaries exceed \$10,000 a year. On the other hand, we know of persons receiving \$15 and less, who do the buying for small stores. The men in this class who receive less than \$20 are usually either managers in such establishments or persons in subordinate positions who enjoy high sounding titles, as, Assistant Superintendent in the Wrapping Department. Women, obviously, are not numerous in these lines and receive less than the men. The majority range from \$14 to \$35. Some of the apparently low paid persons in this category are interested in the business and draw only a nominal salary, but share in the profits.

In the next grade, men again predominate. Most male assistant buyers, floor managers, and heads of stock, receive from \$18 to \$30 a week; women usually get from \$10 to \$20 for the same kind of work.

Turning now to salespeople, we find the rates for most males range from \$12 to \$20; for females from \$6 to \$10. The low paid saleshands are mostly junior help or assistants in smaller shops. It should be remarked that many salespeople receive commissions in addition to their weekly rates. These figures do not therefore indicate the full earning capacity of such persons.

The majority of male stock hands range from \$6 to \$14; women and girls, from \$4 to \$7. Most boy messengers and bundle hands get from \$4 to \$7; girls, from \$3.50 to \$5. The higher paid employees in this division are older persons having special tasks involving some responsibility, or are subordinates in charge of part of the work.

In the office division, the run of special and confidential male clerks is quoted all the way from \$10 to \$30; women in the same position may ordinarily expect to rise to about \$20. Most male bookkeepers get from \$12 to \$20; women, \$7 to \$12. The low paid persons entered in this class are sometimes office assistants who are called bookkeepers, or who have only a small amount of entering to do.

The greater number of male clerks and cashiers receive from \$10 to \$18; girls, from \$5 to \$8. The work in this class varies widely, from tending tubes to balancing financial accounts, and is paid accordingly. These figures merely indicate the general level of wages for the majority of the group. Detailed distributions are shown in other tables.

To complete the account of the clerical occupations, we may note that most male stenographers and telephone operators receive from \$8 to \$15. The two very low paid persons recorded are two boys who are beginning their respective business careers by answering the 'phone and by practicing shorthand. Such work is usually performed by young women, the majority of whom are hired at from \$6 to \$10 a week. Men auditors usually receive from \$9 to \$18; girls who check the sales slips get from \$4 to \$7. The special meaning of the term "auditor" in department stores has already been pointed out. Higher paid persons in this class approach more nearly to the usual definition of accountant.

Considering next the delivery force, we find that most men packers and shipping clerks get from \$10 to \$14. The few girls engaged in this line range as a rule from \$6 to \$9 a week. More than half the drivers and chauffeurs receive \$15 or \$16. The wagon boys center at \$8, and a dollar more or less will cover the wages of the majority of them. Stablemen usually get from \$12 to \$14.

In the shops, we find male workers usually receive from \$14 to \$20; and women, \$8 to \$14. Foremen range higher, ordinarily, from \$16 to \$30. Mechanics, carpenters and decorators, who work about the plant, expect from \$15 to \$20 a week. Apprentices and helpers, of course, get less.

The huge janitorial force includes all kinds of persons from scrubwomen to head janitor. It is therefore difficult to fix general rates; but for the majority of men, from \$10 to \$14, and for women \$6 to \$8 are the mean levels. Personal service also comprises vocations as different as dishwasher, chef and optician.* For men the ordinary range is from \$6 to \$15; for

* See Statistical Appendix, Table No. 51.

women, \$4 to \$7. It is true that many of these do not give full time, although they are regularly employed during certain hours. General male labor is quoted at \$9 to \$12.

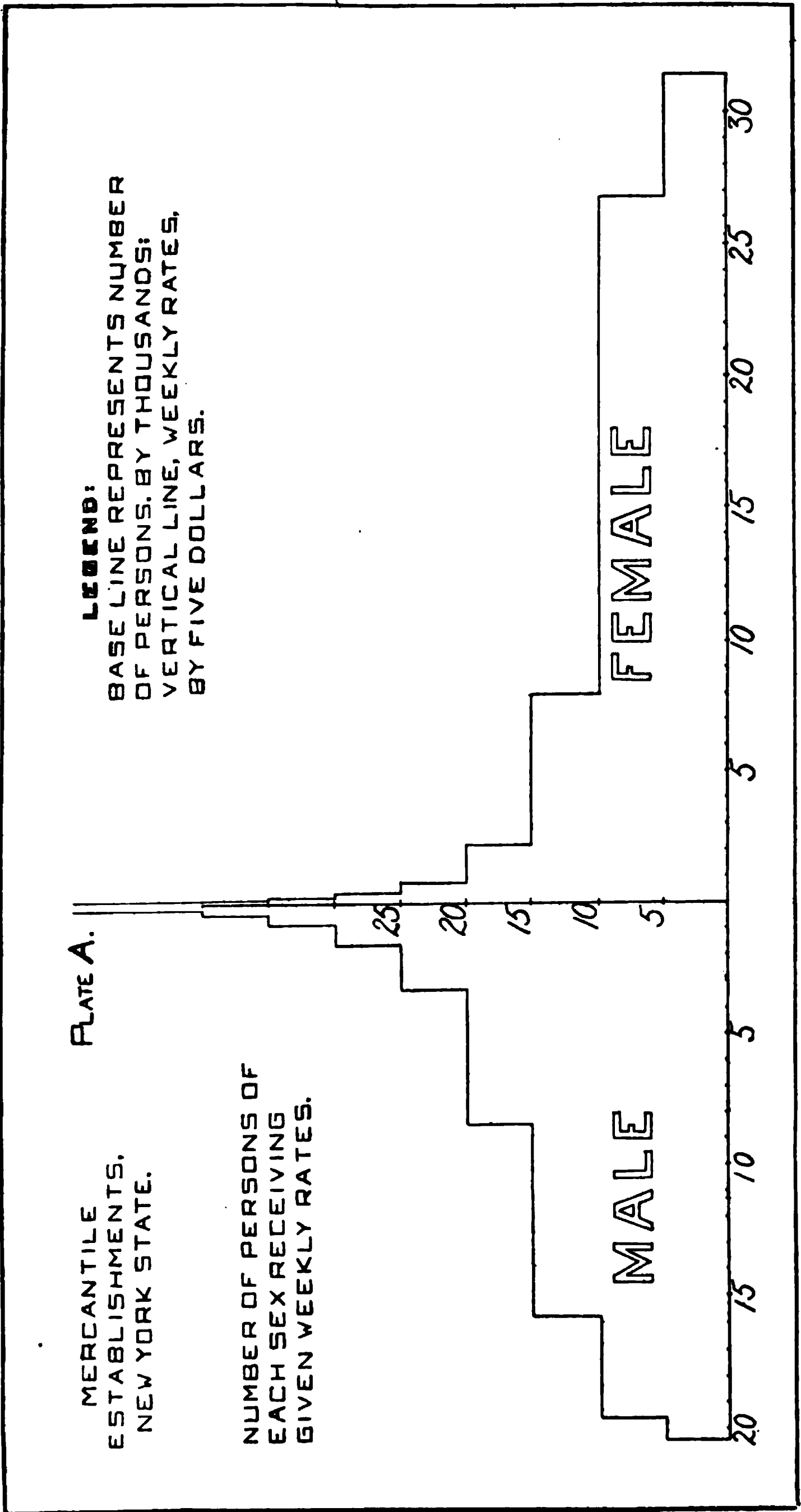
To sum up the whole matter:— Of all males whose occupations are given, more than half receive less than \$14 a week. Of the women and girls, similarly recorded, over 50 per cent get less than \$7.50. The proportions receiving lower rates can be seen in the final columns of the table. The general proportions by larger wage groups are shown in the accompanying graph.

It should be noted that these figures do not include extra or part time help. We have mentioned the fact that employees who left the New York stores after the Christmas season could not be identified by sex and occupation; but for these we have rates and actual earnings. The same is true of all employees in stores where personal data could not be obtained. Of over 17,000 thus included, we find that half of all received less than \$9, and a quarter less than \$6.50. These rates are lower than those for the same proportions of all employees previously enumerated. We may also add that the rates for persons displaced after Christmas were lower than for the entire 17,000, which included also regular employees in certain stores. Doubtless many of the former were saleswomen and delivery help. We wish to call special attention to these facts in order that the character and use of all data collected may be understood.

We should expect that rates would vary from place to place, throughout the State. This is brought out in Table 3 of the statistical appendix. For instance, it is there shown that whereas in New York City 15 per cent of the female help is paid less than \$5 and 27 per cent, \$10 or over, in the smaller cities only 11 per cent of the female employees are paid under \$5 and 26 per cent are paid \$10 or more.

It is also true that the rates vary for different classes of establishments.* The following proportions of all persons of each sex receiving rates below \$8 may serve to illustrate:

* See Statistical Appendix, Tables Nos. 5, 7 and 9.



	Males	Females
Department stores.....	14.4%	52.6%
Neighborhood stores.....	21.5%	68.4%
5 and 10 cent stores	20.9%	98.8%

It is also well known that rates for the same occupation in similar stores vary. Take for example the following distribution for saleswomen in two large department stores in Manhattan:

	Under \$5	\$5-\$9.99	\$10-\$14.99	\$15 and over
Establishment A.....	.6%	85.2%	12.7%	1.6%
Establishment B.....	.....	14.3%	43.9%	41.8%

To be sure there is some difference in the ages of the women and in the lines of goods sold. But if two stores in the same community can do business upon such a different wage scale, many of the advantages of high and of low paid help must be purely a matter of preference with the firms.

Age also affects the earning capacity of employees. We should not expect young girls or old men to be worth as much as persons of maturity and vigor. The accompanying table shows the distribution of rates by age periods for each sex.

Perhaps the most striking feature of this table is the fact that more than one hundred adult men and more than three thousand women eighteen years of age and over are recorded as paid less than six dollars a week. This appears so remarkable that an explanation is in place.

Regarding the low paid men, we may say that some of them are kitchen help, who receive meals in addition to their salary, and waiters who make in tips more than their regular wages. Other men are clerks who put up orders on a commission which adds materially to their flat rate of four or five dollars a week.

As for the women, the same explanation holds regarding kitchen and pantry help. Other low paid girls are beginners in various lines, especially millinery, and receive little or nothing until they learn the trade. But we also find many adult women in office, stock and sales departments in smaller stores, who receive salaries of \$5 or less.

WAGES IN RETAIL STORES

73

TABLE XII.
WEEKLY RATES, BY AGE AND SEX

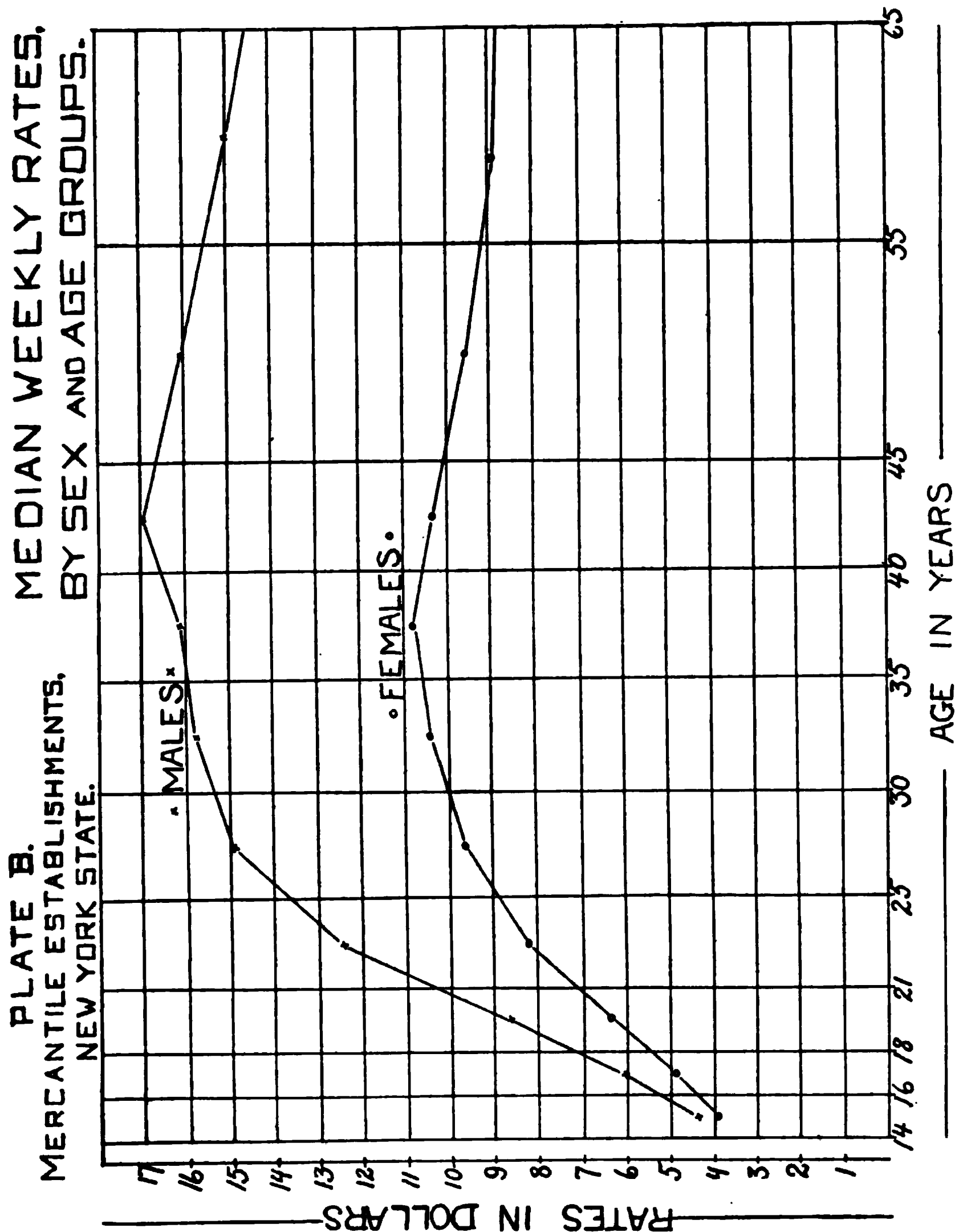
WEEKLY RATES IN DOLLARS	AGE GROUPS					
	21-24		25-29		30-34	
	Male	Female	Male	Female	Male	Female
Less than \$3.00	5	1	1	1	1	1
\$3.00-\$3.49	23	20	18	13	15	15
3.50-3.99	50	9	5	3	3	3
4.00-4.49	287	14	78	87	11	44
4.50-4.99	310	2	66	51	39	39
5.00-5.49	1,070	20	272	112	54	54
5.50-5.99	270	4	85	31	9	9
6.00-6.49	1,976	34	1,016	355	137	137
6.50-6.99	199	4	121	34	10	10
7.00-7.49	1,287	63	1,351	586	279	279
7.50-7.99	71	37	127	51	20	20
8.00-8.99	668	167	1,415	694	285	285
9.00-9.99	270	189	782	563	258	258
10.00-10.99	155	460	666	621	292	292
11.00-11.99	35	218	231	281	118	118
12.00-12.99	58	658	298	468	308	308
13.00-13.99	...	206	67	115	79	79
14.00-14.99	17	222	71	172	117	117
15.00-15.99	4	424	71	176	131	131
16.00-16.99	4	128	23	98	110	110
18.00-19.99	3	83	25	88	83	83
20.00-24.99	1	62	15	73	85	85
25.00-29.99	1	9	3	25	42	42
30.00-34.99	2	3	21	11	12	12
35.00-39.99	1	8	9	3	8	8
40.00 and over	1	3	8	7	14	14
Total.....	6,768	2,014	6,813	4,726	2,411	2,552
Median.....	\$4.34	\$12.44	\$8.19	\$9.60	\$15.74	\$10.42
Total.....	672	1,499	3,912	1,234	83.94	83.94
Median.....	\$4.34	\$12.44	\$8.19	\$9.60	\$15.74	\$10.42

APPENDIX IV—WAGE INVESTIGATION

TABLE XII.
SPECIFIED WEEKLY RATES, BY AGE AND SEX (concluded)

AGE GROUPS											
	35-39		40-44		45-54		55-64		65 AND OVER		TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.	.....	1	.....	.....	.....	.....	.....	.....	9	75	Less than \$3 00
\$3 00-\$3 49.	.....	12	.....	5	.....	2	.....	.....	60	526	...\$3 00-\$3 49
3 50- 3 99.	.....	6	.....	.....	.....	.....	.....	.....	106	952	....3 50- 3 99
4 00- 4 49.	7	26	11	9	11	8	3	1	503	1,992	....4 00- 4 49
4 50- 4 99.	2	31	.....	15	.....	13	.....	2	145	1,137	....4 50- 4 99
5 00- 5 49.	4	38	.....	18	.....	23	.....	2	602	2,568	....5 00- 5 49
5 50- 5 99.	.....	.....	.....	4	.....	4	.....	2	61	551	....5 50- 5 99
6 00- 6 49.	3	101	.....	67	.....	79	.....	14	610	4,299	....6 00- 6 49
6 50- 6 99.	.....	9	.....	7	.....	3	.....	1	46	424	....6 50- 6 99
7 00- 7 49.	10	189	.....	124	.....	102	.....	20	575	4,092	....7 00- 7 49
7 50- 7 99.	.....	26	.....	21	.....	33	.....	5	255	363	....7 50- 7 99
8 00- 8 99.	14	240	10	118	13	110	16	28	942	3,620	....8 00- 8 99
9 00- 9 99.	23	193	12	91	29	76	13	11	686	2,267	....9 00- 9 99
10 00-10 99.	100	230	70	106	124	101	87	20	1,532	2,202	....10 00-10 99
11 00-11 99.	62	78	51	35	95	15	43	3	752	800	....11 00-11 99
12 00-12 99.	291	215	237	109	391	76	187	14	2,776	1,550	....12 00-12 99
13 00-13 99.	85	63	71	22	107	20	44	1	842	369	....13 00-13 99
14 00-14 99.	179	116	116	42	215	33	81	5	1,334	574	....14 00-14 99
15 00-15 99.	301	119	185	63	301	42	97	2	2,234	612	....15 00-15 99
16 00-17 99.	243	89	186	48	271	30	88	3	1,555	407	....16 00-17 99
18 00-19 99.	214	87	166	26	259	14	73	2	1,301	329	....18 00-19 99
20 00-24 99.	306	93	277	46	369	23	108	3	1,692	340	....20 00-24 99
25 00-29 99.	171	48	164	24	190	17	57	4	818	164	....25 00-29 99
30 00-34 99.	82	14	76	15	104	4	32	.....	383	58	....30 00-34 99
35 00-39 99.	17	14	34	8	48	2	17	.....	156	36	....35 00-39 99
40 00 and over.	71	14	59	8	83	8	16	1	285	54	....40 00 and over
Total.....	2,185	2,052	1,736	1,031	2,629	838	973	145	218	25	.....Total
Median.....	\$16 09	\$10 67	\$16 99	\$10 35	\$16 09	\$9 55	\$15 02	\$8 89	\$14 16	\$8 67	.....Median

The accompanying graph shows the general tendency of wages to vary with age. The median rate for each age group has been plotted, and the trend after 65 has been indicated. The figure shows that wages for males tend to rise rapidly until about 30, then less rapidly until 45, after which they appear to decline steadily. Girls begin at lower rates and do not rise as rapidly as boys. The wages of women continue to mount slowly until about 40 and then gradually fall off. The differences between the sexes at all ages are apparent.



What the drawing means in a word is this: The majority of male employees in stores never get as much as \$17, and half the women cannot rise to \$11 a week. The great mass of girls are making \$5 or \$6, and the ordinary man does not reach the \$15 level until he is over 30.

It is plain from the figures in the preceding table that after 25 years of age people begin to drop out more and more rapidly. This is especially true of women. So that those who remain to reap the rewards of maturity are a constantly dwindling band. Tables numbered V in the appendix give the distribution for different kinds of stores.

ACTUAL EARNINGS

As already explained, the amounts received by store employees in their pay envelopes for one week were also entered, in order to compare actual earnings with rates quoted. It should be noted that the time chosen in New York City — a week in December — is the period when the earnings of salespeople are highest because of the volume of trade served before Christmas. The accompanying table shows the amounts for each occupation according to sex, together with the numbers of unclassified help, totals and cumulative per cents.

At first glance this table seems to be practically identical with the preceding one on rates; but a brief examination discloses differences. Although the numbers recorded are virtually the same (except for shop hands and mechanics, some of whom are paid on a piece rate basis) the proportion of all persons who received a given amount is not the same as the per cent of employees for whom this rate was quoted. The total number of persons who received small amounts is much greater than the number entered at the lower rates.

For example, only 99 persons were quoted as receiving a weekly rate of less than \$3; but 2,040 persons actually received sums less than this amount. Eighteen per cent of all employees were quoted at rates under \$6; but 23 per cent got less for the week recorded. On the other hand the proportions at \$8 and over are practically the same. This point is worth noting, since it shows that the low paid employees are the ones who suffer most from deductions.

TABLE XIII.
ACTUAL WEEKLY EARNINGS BY OCCUPATION, BY AGE AND SEX

WEEKLY EARNINGS IN DOLLARS	SUPERINTENDENTS AND BUYERS		ASSISTANT BUYERS AND FLOOR MANAGERS		SALESPeOPLE		STOCK HANDS		MESSENGERS		WEEKLY EARNINGS IN DOLLARS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
All amounts.....	286	93	1,041	627	4,566	15,687	1,693	1,713	1,135	2,807	.....All amounts
Under \$3 00.....	.....	.....	.....	3	15	213	19	32	36	166	.....Under \$3 00
\$3 00- 3 49.....	.....	.....	.....	.....	10	93	9	57	67	358	.....3 00- 3 49
3 50- 3 99.....	.....	.....	1	.....	3	150	17	166	84	483	.....3 50- 3 99
4 00- 4 49.....	.....	.....	2	1	9	348	50	251	285	919	.....4 00- 4 49
4 50- 4 99.....	.....	.....	1	2	4	388	41	158	79	236	.....4 50- 4 99
5 00- 5 49.....	.....	1	.....	2	21	911	119	309	158	288	.....5 00- 5 49
5 50- 5 99.....	.....	.....	.....	.....	6	564	32	69	32	52	.....5 50- 5 99
6 00- 6 49.....	.....	.....	1	12	51	1,891	158	203	91	130	.....6 00- 6 49
6 50- 6 99.....	.....	.....	.....	13	24	592	21	36	17	58	.....6 50- 6 99
7 00- 7 49.....	.....	.....	1	14	57	1,971	116	124	64	52	.....7 00- 7 49
7 50- 7 99.....	.....	.....	2	16	13	533	25	21	13	12	.....7 50- 7 99
8 00- 8 99.....	.....	3	2	28	116	2,211	124	92	89	38	.....8 00- 8 99
9 00- 9 99.....	.....	.....	8	57	96	1,445	110	63	33	6	.....9 00- 9 99
10 00-10 99.....	3	5	14	61	244	1,257	149	43	36	4	.....10 00-10 99
11 00-11 99.....	.....	2	10	30	124	565	110	26	11	3	.....11 00-11 99
12 00-12 99.....	6	6	27	63	440	818	220	25	19	1	.....12 00-12 99
13 00-13 99.....	2	4	12	25	190	298	58	9	6	1	.....13 00-13 99
14 00-14 99.....	6	6	22	40	358	350	92	11	7	2	.....14 00-14 99
15 00-15 99.....	7	7	57	49	577	354	68	5	5	.....	.....15 00-15 99
16 00-17 99.....	14	4	70	47	519	287	63	7	2	.....	.....16 00-17 99
18 00-19 99.....	8	5	116	45	523	185	35	3	1	.....	.....18 00-19 99
20 00-24 99.....	30	7	274	53	715	169	27	2	.....	.....	.....20 00-24 99
25 00-29 99.....	49	13	228	35	273	54	10	1	.....	.....	.....25 00-29 99
30 00-34 99.....	53	9	103	14	92	17	4	.....	.....	.....	.....30 00-34 99
35 00-39 99.....	20	5	44	11	30	9	4	.....	.....	.....	.....35 00-39 99
40 00 and over.....	88	15	42	6	46	14	2	.....	.....	.....	.....40 00 and over

APPENDIX IV—WAGE INVESTIGATION

TABLE XIII.
ACTUAL WEEKLY EARNINGS BY OCCUPATION, BY AGE AND SEX (Continued)

WEEKLY EARNINGS IN DOLLARS	CONFIDENTIAL CLERKS		BOOKKEEPERS		CLERKS AND CASHIERS		STENOGRAPHERS AND PHONE OPERATORS		AUDITORS		WEEKLY EARNINGS IN DOLLARS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
All amounts.....	318	75	265	610	1,663	4,254	34	792	66	664	.....All amounts
Under \$3 00.....	3	.....	.....	1	6	38	.....	5	.....	14	.....Under \$3 00
\$3 00-3 49.....	1	1	.....	1	3	50	.....	2	.....	28	.....\$3 00-3 49
3 50-3 99.....	.....	.....	.....	2	2	128	1	4	.....	63	.....3 50-3 99
4 00-4 49.....	.....	1	.....	5	32	244	.....	9	.....	79	.....4 00-4 49
4 50-4 99.....	.....	.....	.....	3	12	184	.....	8	.....	67	.....4 50-4 99
5 00-5 49.....	11	.....	.....	14	52	421	1	36	1	89	.....5 00-5 49
5 50-5 99.....	1	.....	1	11	13	201	.....	31	.....	27	.....5 50-5 99
6 00-6 49.....	14	2	1	37	59	662	.....	109	4	84	.....6 00-6 49
6 50-6 99.....	1	2	.....	13	19	162	.....	16	2	24	.....6 50-6 99
7 00-7 49.....	16	3	3	50	45	592	3	109	2	73	.....7 00-7 49
7 50-7 99.....	1	2	1	13	9	84	.....	20	3	11	.....7 50-7 99
8 00-8 99.....	15	2	7	63	85	509	6	120	2	46	.....8 00-8 99
9 00-9 99.....	9	2	10	85	65	292	8	90	8	20	.....9 00-9 99
10 00-10 99.....	13	10	8	89	126	221	3	80	8	12	.....10 00-10 99
11 00-11 99.....	2	1	5	48	70	133	.....	36	3	4	.....11 00-11 99
12 00-12 99.....	13	10	25	68	212	106	2	45	7	9	.....12 00-12 99
13 00-13 99.....	5	3	13	29	70	49	2	12	3	2	.....13 00-13 99
14 00-14 99.....	3	2	11	30	110	50	.....	17	2	2	.....14 00-14 99
15 00-15 99.....	25	1	26	23	156	44	5	19	3	4	.....15 00-15 99
16 00-17 99.....	21	7	37	11	101	27	.....	4	2	5	.....16 00-17 99
18 00-19 99.....	30	8	43	7	104	20	2	9	5	1	.....18 00-19 99
20 00-24 99.....	42	10	50	4	161	20	1	10	3	.....	.....20 00-24 99
25 00-29 99.....	31	3	12	2	65	11	.....	.....	2	.....	.....25 00-29 99
30 00-34 99.....	25	3	3	1	39	4	.....	1	3	.....	.....30 00-34 99
35 00-39 99.....	7	.....	3	.....	21	.....	.....	.....	1	.....	.....35 00-39 99
40 00 and over.....	29	2	6	.....	26	2	.....	.....	2	.....	.....40 00 and over

TABLE XIII.
ACTUAL WEEKLY EARNINGS BY OCCUPATION, BY AGE AND SEX (Continued)

WEEKLY EARNINGS IN DOLLARS	PACKERS AND SHIPPERS		DRIVERS AND CHAUFFEURS	WAGON BOYS		STABLE MEN	SHOP HANDS		FOREMEN	MECHANICS		JANITORIAL SERVICE		WEEKLY EARNINGS IN DOLLARS
	Male	Female	Male	Male	Female	Male	Male	Female	Male	Male	Female	Male	Female	
All amounts....	1,433	57	1,442	1,349	320	1,391	2,570	137	825	2,130	306	....All amounts		
Under \$3 00....	10	2	2	26	....	3	42	....	2	8	3	....Under \$3 00		
\$3 00- 3 49....	....	1	3	13	....	3	33	....	1	4	3	....\$3 00- 3 49		
3 50- 3 99....	1	....	1	18	1	3	14	....	1	2	3	....3 50- 3 99		
4 00- 4 49....	3	2	....	46	1	3	31	....	2	6	15	....4 00- 4 49		
4 50- 4 99....	3	1	....	27	....	1	22	....	1	4	4	....4 50- 4 99		
5 00- 5 49....	12	6	4	135	1	3	79	....	3	10	6	....5 00- 5 49		
5 50- 5 99....	14	2	1	15	....	1	47	....	1	7	17	....5 50- 5 99		
6 00- 6 49....	20	8	2	114	....	12	136	....	3	26	66	....6 00- 6 49		
6 50- 6 99....	14	2	3	21	....	8	39	....	2	8	13	....6 50- 6 99		
7 00- 7 49....	32	3	8	104	1	14	163	....	6	17	83	....7 00- 7 49		
7 50- 7 99....	11	6	9	220	3	6	84	....	....	12	25	....7 50- 7 99		
8 00- 8 99....	54	7	19	221	4	31	289	....	5	78	28	....8 00- 8 99		
9 00- 9 99....	47	8	13	114	2	15	277	....	8	124	18	....9 00- 9 99		
10 00-10 99....	156	4	68	118	3	24	298	1	12	386	15	....10 00-10 99		
11 00-11 99....	115	2	40	43	19	37	134	1	14	279	....	....11 00-11 99		
12 00-12 99....	342	....	148	76	75	96	214	2	43	622	2	....12 00-12 99		
13 00-13 99....	148	....	120	17	46	67	83	3	30	127	1	....13 00-13 99		
14 00-14 99....	142	1	126	10	104	108	114	7	47	176	1	....14 00-14 99		
15 00-15 99....	106	2	492	5	17	165	115	6	95	111	2	....15 00-15 99		
16 00-17 99....	108	....	308	3	22	189	95	18	109	68	....	....16 00-17 99		
18 00-19 99....	51	....	50	3	5	193	63	16	127	24	....	....18 00-19 99		
20 00-24 99....	33	....	16	....	8	197	100	34	189	19	1	....20 00-24 99		
25 00-29 99....	8	....	8	....	2	111	49	17	76	5	....	....25 00-29 99		
30 00-34 99....	3	....	1	....	3	38	11	10	19	3	....	....30 00-34 99		
35 00-39 99....	....	....	....	....	2	23	13	11	15	2	....	....35 00-39 99		
40 00 and over..	....	....	....	....	1	40	25	11	14	2	....	....40 00 and over		

TABLE XIII.
ACTUAL WEEKLY EARNINGS BY OCCUPATION, BY AGE AND SEX (Concluded)

WEEKLY EARNINGS IN DOLLARS	PERSONAL SERVICE		GENERAL LABOR		TOTAL NUMBERS			CUMULATIVE PER CENT				WEEKLY EARNINGS IN DOLLARS	
	Male	Female	Male	Female	Male	Female	UNCLASSI- FIED	GRAND TOTAL	Male	Female	UNCLASSI- FIED		GRAND TOTAL
All amounts....	463	1,259	125		20,672	31,517	17,316	69,505	.....	.....	.....	.....	....All amounts
Under \$3 00....	6	38	2		138	558	1,344	2,040	0.7	1.8	7.8	3.	....Under \$3 00
\$3 00- 3 49....	4	99	1		119	726	480	1,325	1.2	4.	10.6	4.9	....\$3 00- 3 49
3 50- 3 99....	2	50	.....		137	1,063	447	1,647	1.9	7.5	13.1	7.2	....3 50- 3 99
4 00- 4 49....	29	204	.....		468	2,109	1,049	3,626	4.2	14.3	19.2	12.4	....4 00- 4 49
4 50- 4 99....	5	95	1		179	1,168	541	1,888	5.	17.8	19.4	15.2	....4 50- 4 99
5 00- 5 49....	48	196	8		587	2,358	908	3,853	7.9	25.3	27.5	20.7	....5 00- 5 49
5 50- 5 99....	4	68	2		130	1,089	492	1,711	8.5	28.8	30.2	23.1	....5 50- 5 99
6 00- 6 49....	33	190	3		592	3,530	1,442	5,564	11.4	40.	38.7	31.2	....6 00- 6 49
6 50- 6 99....	3	29	2		145	997	423	1,565	12.1	43.1	41.2	33.4	....6 50- 6 99
7 00- 7 49....	42	100	2		533	3,337	1,272	5,142	14.6	53.7	48.5	40.8	....7 00- 7 49
7 50- 7 99....	1	13	3		332	840	403	1,575	16.3	56.5	50.8	43.1	....7 50- 7 99
8 00- 8 99....	32	56	10		900	3,492	1,222	5,614	20.3	67.5	57.7	51.2	....8 00- 8 99
9 00- 9 99....	14	34	11		695	2,397	763	3,855	24.	75.	60.	56.7	....9 00- 9 99
10 00-10 99....	26	30	11		1,409	2,130	1,229	4,768	30.8	81.8	69.3	63.4	....10 00-10 99
11 00-11 99....	8	9	7		908	993	594	2,495	35.1	85.	72.7	67.1	....11 00-11 99
12 00-12 99....	34	22	33		2,442	1,389	1,197	5,028	47.	89.3	79.7	74.8	....12 00-12 99
13 00-13 99....	17	1	5		941	517	418	1,876	51.5	91.	82.	77.2	....13 00-13 99
14 00-14 99....	26	7	4		1,361	633	509	2,503	58.	93.2	84.8	80.7	....14 00-14 99
15 00-15 99....	25	7	10		1,961	632	650	3,243	67.7	95.	89.	85.3	....15 00-15 99
16 00-17 99....	24	5	7		1,685	499	493	2,677	75.7	96.7	91.8	89.2	....16 00-17 99
18 00-19 99....	20	1	1		1,357	347	403	2,107	82.3	97.7	94.2	92.2	....18 00-19 99
20 00-24 99....	45	2	2		1,850	378	488	2,716	91.2	98.8	97.	96.1	....20 00-24 99
25 00-29 99....	7	2	.....		904	171	282	1,357	95.6	99.5	98.2	98.	....25 00-29 99
30 00-34 99....	3	.....	.....		402	60	82	544	96.8	99.6	98.8	98.9	....30 00-34 99
35 00-39 99....	2	.....	.....		185	38	62	285	98.4	99.7	99.3	99.2	....35 00-39 99
40 00 and over..	3	1	.....		312	66	123	501	100.	100.	100.	100.	....40 00 and over

Examining the table of earnings more closely, we find that the highest percentages of persons receiving very small amounts are found among the unclassified help, who left the New York City stores after Christmas. Since their rates do not run so low as those for the female help retained, we may assume that some of these shifters did not work a full week.

But turning to the employees classified by occupation and sex, we note that among them also the numbers and per cents of all receiving small amounts are greater than those entered for these rates. For instance, only 10 male and 75 female employees were reported as receiving rates under \$3; but 138 males and 558 females actually received less for the week recorded. Sixty-two per cent of all women and girls for whom rates were given were supposed to receive less than \$9 per week; but we find that the actual earnings of 67 per cent of all females fell below this figure. The flat rates and actual earnings of male employees run more nearly parallel.

If we examine the specific occupations we discover interesting variations. For instance, among salespeople we note the same tendency for actual earnings to fall below expected rates, especially under \$6 for women and girls. On the other hand we find that the proportion of women receiving \$13 or over and of men receiving \$16 or more is larger than we should expect from the numbers recorded at these higher rates. This must be explained by commissions or extra pay in addition to regular salaries. Similar variations may be found among packers and delivery hands.

The difference between rates and actual earnings can be brought out by showing their correlation with age. The following table shows that there are more persons at all ages who receive low amounts than are entered for such rates. For instance, 138 adult men and 3,337 women 18 years of age and over were quoted at rates under \$6; but 241 men and 4,388 women actually received less than this amount. The calculated median earnings for all ages run slightly below those for rates except for men over 30.

TABLE XIV.
ACTUAL WEEKLY EARNINGS, BY AGE AND SEX (concluded)

ACTUAL WEEKLY EARNINGS IN DOLLARS	AGE GROUPS										ACTUAL WEEKLY EARNINGS IN DOLLARS	
	35-39		40-44		45-54		55-64		65 AND OVER			TOTAL
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
Less than \$3 00.	4	22	6	5	4	2	2	.....	133	553	Less than \$3 00
\$3 00-\$3 49....	3	16	1	11	1	5	1	.....	116	724	...\$3 00-\$3 49
3 50- 3 99....	1	12	1	6	2	4	1	.....	135	1,040	....3 50- 3 99
4 00- 4 49....	8	27	6	10	8	10	2	.....	465	2,090	....4 00- 4 49
4 50- 4 99....	3	32	1	10	1	14	3	.....	176	1,160	....4 50- 4 99
5 00- 5 49....	4	45	4	23	9	34	5	.....	583	2,344	....5 00- 5 49
5 50- 5 99....	2	27	.....	13	1	22	3	.....	129	1,077	....5 50- 5 99
6 00- 6 49....	7	88	5	72	12	71	13	.....	589	3,490	....6 00- 6 49
6 50- 6 99....	5	34	4	14	4	12	3	.....	144	955	....6 50- 6 99
7 00- 7 49....	11	148	6	107	10	82	17	.....	527	3,273	....7 00- 7 49
7 50- 7 99....	3	49	1	30	4	33	7	.....	325	800	....7 50- 7 99
8 00- 8 99....	22	216	13	112	19	108	23	.....	885	3,356	....8 00- 8 99
9 00- 9 99....	25	186	14	87	34	75	9	.....	686	2,247	....9 00- 9 99
10 00-10 99....	90	212	63	89	111	97	17	.....	1,400	2,013	...10 00-10 99
11 00-11 99....	82	101	62	41	102	18	4	.....	901	918	...11 00-11 99
12 00-12 99....	251	171	210	96	345	57	15	.....	2,421	1,297	...12 00-12 99
13 00-13 99....	82	77	78	27	114	29	1	.....	936	473	...13 00-13 99
14 00-14 99....	179	121	105	41	218	25	5	.....	1,347	580	...14 00-14 99
15 00-15 99....	258	113	163	58	293	39	2	.....	1,943	575	...15 00-15 99
16 00-17 99....	270	106	204	50	263	32	3	.....	1,676	459	...16 00-17 99
18 00-19 99....	226	80	166	26	277	15	2	.....	1,344	317	...18 00-19 99
20 00-24 99....	331	92	298	51	385	24	3	.....	1,832	350	...20 00-24 99
25 00-29 99....	180	45	171	27	207	15	4	.....	899	158	...25 00-29 99
30 00-34 99....	86	13	73	13	97	4	.....	.....	396	53	...30 00-34 99
35 00-39 99....	26	13	37	8	56	2	.....	.....	183	35	...35 00-39 99
40 00 and over..	76	14	64	9	88	8	1	.....	310	54	.40 00 and over
Total.....	2,235	2,060	1,756	1,036	2,665	837	982	146	217	20,481	.....Total
Median.....	\$16 57	\$10 60	\$17 32	\$10 20	\$16 31	\$9 30	\$15 23	\$8 22	\$14 16	.....	.....Median

COMMISSIONS, PREMIUMS AND BONUSES

In 29 stores payments in addition to regular weekly rates were entered. These vary in character from a percentage on all sales or on those above the department average, to premiums for pushing certain kinds of stock or for discovering errors. In other places salespeople are given extra amounts during the holiday rush. Payment for overtime is fairly common among the delivery force.

Not only does the basis of premiums and commissions differ, but also the class of persons who are eligible to receive additional amounts. In some places all salespeople are included; in others only those in certain departments, who make most of their salaries on commissions.

The periods for which these payments are calculated differ widely too. Some additions are paid weekly, while others are reckoned for a whole season. Wherever these supplementary amounts were found, they were reduced so far as possible to a weekly basis and added to the regular wages.

No general system of supplementary earnings can be said to prevail among the establishments investigated, and any attempt to give an account of the methods in vogue would necessitate a description of all the plans in use. For the sake of brevity, therefore, it seemed better to illustrate the effects of a generous commission on wages, rather than to enumerate in detail all the variations from this cause. The following example presents a comparison between rates quoted and amounts received by salespeople in a store which gives 1 per cent commission on all sales. It should be remarked that this is an unusually large commission, and that it was computed for one of the busiest weeks in the year.

According to these distributions it is evident that the commissions raised the earnings of salesmen about 42 per cent and those of saleswomen nearly 54 per cent. But it is also clear that the flat rates for both are fixed low to allow for the extra earnings.

TABLE XV
EFFECT OF COMMISSIONS ON EARNINGS AS COMPARED WITH FLAT RATES

AMOUNTS PER WEEK	MALE		FEMALE	
	Distribu- tion by rates	Distribu- tion by earnings	Distribu- tion by rates	Distribu- tion by earnings
Less than \$3 00 .....	.....	.....	.....	2
3 00-\$3 49.....	.....	.....	.....	1
3 50- 3 99.....	.....	.....	22	11
4 00- 4 49.....	.....	.....	88	24
4 50- 4 99.....	.....	.....	66	3
5 00- 5 49.....	.....	.....	80	8
5 50- 5 99.....	1	.....	142	24
6 00- 6 49.....	.....	.....	66	31
6 50- 6 99.....	1	.....	83	38
7 00- 7 49.....	2	1	25	51
7 50- 7 99.....	1	.....	27	44
8 00- 8 99.....	9	3	31	107
9 00- 9 99.....	7	.....	17	99
10 00-10 99.....	9	3	5	58
11 00-11 99.....	5	3	2	37
12 00-12 99.....	1	1	2	45
13 00-13 99.....	1	8	4	24
14 00-14 99.....	.....	5	.....	19
15 00-15 99.....	1	2	.....	17
16 00-17 99.....	2	4	.....	9
18 00-19 99.....	1	7	.....	5
20 00-24 99.....	.....	3	.....	.....
25 00-29 99.....	.....	1	.....	.....
Not recorded.....	.....	.....	2	5
Calculated medians for all recorded.....	\$9 93	\$14 30	\$5 76	\$8 85

DEDUCTIONS

One hundred and ninety-four female employees out of 831 questioned in 20 New York City stores, testified to having been fined for lateness. The amounts vary from 10 per cent to forfeiture of half a day's pay. Forty-one women and girls of those interviewed testified to other fines for errors and shortage. Several male employees mentioned fines for breakage and loss of packages. Wherever such deductions were found, they were taken from the regular weekly earnings. On the other hand, deposits for keys or uniforms and amounts paid for goods were not subtracted.

In regard to payments for employees' mutual benefit societies, our procedure differed according to the nature of the contributions. If membership in the association was compulsory and dues were withheld from the pay envelope, we regarded this as a necessary deduction and subtracted it from the weekly earnings. If, on the

other hand, membership was voluntary, we regarded the payment of dues as a personal expenditure, and did not take it from the earnings. Any benefits paid during the period were pro-rated and added to regular wages.

After the investigation of the New York City stores had been completed, and before that of the up-state establishments had been begun, the Legislature passed a measure making it unlawful for corporations to conduct mutual benefit societies for their employees, upon a compulsory basis. The whole status of such associations has, therefore, been changed. Some have been discontinued and others have been placed on a voluntary basis. Without attempting to enter into a discussion of this matter, we refer the reader to the appended report on the organization of benefit societies in the larger stores of New York City, as they existed last winter, before the passage of the new law.

DAYS WORKED

Perhaps the easiest explanation of the difference between expected and actual earnings is that persons who fell below their fixed rate did not work the full week, and the deductions are for time lost. In order to prove the truth of this hypothesis, our agents entered from the pay-roll the number of days worked in a week last spring by 11,000 store employees in cities up-state. The following table shows that 1,270 persons (nearly 12 per cent of the whole number) lost a day or more. The women and girls lost more than the men and boys. Some of the male help were on duty Sunday. Most of these were persons in charge of the plant. We found also upon questioning employees in New York City stores that both men and women worked occasionally on Sundays, especially at stock-taking time. They were usually paid extra for this.

TABLE XVI
PERSONS WORKING GIVEN NUMBER OF DAYS A WEEK

	TOTAL		DAYS WORKED PER WEEK								Average days per person
	Persons	Days	-1	1	2	3	4	5	6	7	
Male.....	3,836	22,664	2	4	15	29	35	131	3,504	26	5.8
Female.....	7,173	41,341	7	27	46	105	160	709	6 118	1	5.8
Both.....	11,009	64,005	9	31	61	134	195	840	9,712	27	5.8
Per cent of all employees .....			.1	.3	.6	1.2	1.8	7.6	88.	.2	.....

HOURS

During the course of this investigation, the new law, reducing the number of hours for children in mercantile establishments from 54 to 48, and fixing 54 hours for female employees over 16 in all cities, went into effect. The New York City stores were taken while the old statute was in force, but the up-state establishments were recorded under the present regulation. The registration of the old order has not much point except to show variations in usage.

Under the former law most of the larger New York City stores regularly opened last winter at 8:30 or 9 and closed at 5:30 or 6, making a 9 hour day and a 54 hour week. Most of the smaller stores remained open Saturday evenings, making a long day of 11 or 12 hours. Forty-five minutes or an hour was the usual lunch period allowed.

Under these general conditions 191 male and 829 female employees interviewed in New York City stores last winter reported the following as their regular hours:

TABLE XVII
HOURS WORKED BY 1,020 EMPLOYEES IN NEW YORK CITY STORES, WINTER 1913-1914

	AGE						TOTAL		PER CENT OF	
	14-15		16 AND OVER		AGE NOT GIVEN					
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	All Males	All Fe- males
Totals.....	4	25	186	791	1	13	191	829	100	100
<i>Hours:</i>										
48 and under.....	....	1	....	31	....	....	....	32	4.	....
Over 48, incl. 54.....	4	21	88	472	1	11	93	504	61.	49.
Over 54, incl. 60.....	....	3	78	287	....	2	78	292	35.	41.
Over 60, incl. 66.....	....	....	17	1	....	....	17	1	.1	9.
Over 66, incl. 72.....	....	....	3	....	....	....	3	....	....	1.

The table shows that the majority of all employees worked 54 hours or less. But 4 violations also appear, namely 3 girls under 16 years, who worked 54 hours, and 1 woman who worked over 60 hours.

The 12 hour day on Saturday, which was fairly common in the smaller New York City stores, and the extra hours preceding Christmas bring special hardship. In the 2 weeks before the holidays, 90 men out of 191 interviewed, and 461 women out of

812, worked from 5 to 20 hours in addition to the regular schedule. Six other men and 21 women worked from 30 to 40 hours extra time during this fortnight.

Twenty-eight men and 62 women reported hours regularly in excess of those observed by the store as a whole, varying from a few minutes to 7 hours a week. This was ordinarily evening work, paid for by supper money, amounting to 35 cents or so. Altogether 104 men and 250 women, among the thousand persons interviewed, reported some overtime beside the usual Christmas rush.

After the new law became effective we inquired of the New York City stores what readjustment of hours had been made. Some of the large stores were not affected, but in most establishments a reduction to 8½ or 9 hours a day was accomplished. Of course the summer brought a weekly half holiday to many and a few stores closed all day Saturday during the hot weather.

Up-state the hours noted for 64 firms do not differ markedly from those now established in New York City, except that the long day on Saturday is more general. Through personal interviews with employees we found the same tendencies to extra night work at inventory time and before Christmas. Of 1,700 persons registered last spring by hours worked, the number for each age group and sex is shown in the accompanying table.

It should be remembered that the present law limiting women to 54 hours and children to 48 a week, was in effect. It is obvious that the law was broken in the case of 26 women and 41 children. Several men also are registered for very long hours. These figures are from the books of the firms:

TABLE XVIII
HOURS WORKED PER WEEK UNDER NEW LAW — UP-STATE

	AGE						TOTAL		PER CENT OF	
	14-15		16-17		18(+)					
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	All Males	All Fe- males
Total.....	33	16	76	107	569	921	678	1,044	100	100
<i>Hours:</i>										
48 and under.....	6	2	3	16	25	168	34	186	5.	18
Over 48, incl. 54.....	27	14	71	89	454	729	552	832	81.	80
Over 54, incl. 60.....	.....	.....	2	2	85	24	87	26	13.	2
Over 60, incl. 66.....	.....	.....	.....	.....	4	.....	4	.....	1.	.....
Over 72.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....

“ EXTRA HELP ”

Beside regular employees who are hired by the week, many stores have additional help who are on duty only during certain hours in the day or on certain days in the week. They are engaged to handle the additional business that comes with afternoon shopping or week-end sales. Since this supplementary force is not strictly comparable with the regular help in regard to hours and wages, we have listed these persons separately, and here present a brief account of their character and earnings.

We recorded nearly 800 “extras” in all kinds of stores throughout the State. The personal data for many of them are lacking, because often they were not in the stores when our agents were inspecting. We secured some information regarding more than 500, however, and this may be briefly summarized without much statistical presentation.

Their distribution by age and sex shows some peculiarities. Females greatly preponderate, constituting seven-eighths of those recorded by sex. Moreover 46 per cent of the women and girls reported are between the ages of 16 and 18. Several proprietors informed us that some of these were high school girls who worked on Saturdays or in the afternoons of other days. As to nativity, 93 per cent are native born. Conjugal condition is, of course, affected by age, so that over 90 per cent of all are unmarried persons.

Regarding the kind of work performed, 92 per cent were in the stock and sales departments, and the rest were mostly extra janitorial and office help.

As to time worked, the great majority were on duty one day in the week, and the next largest number for half a day. For their services most men received \$2 a day and the women \$.75 or \$1.

We have here to do with a supplementary force which obviously does not live on these wages. How far it competes with regular workers is difficult to state. The wages show that the earnings of these extra people are lower than those of the majority of regular help.

SEASONAL FLUCTUATIONS

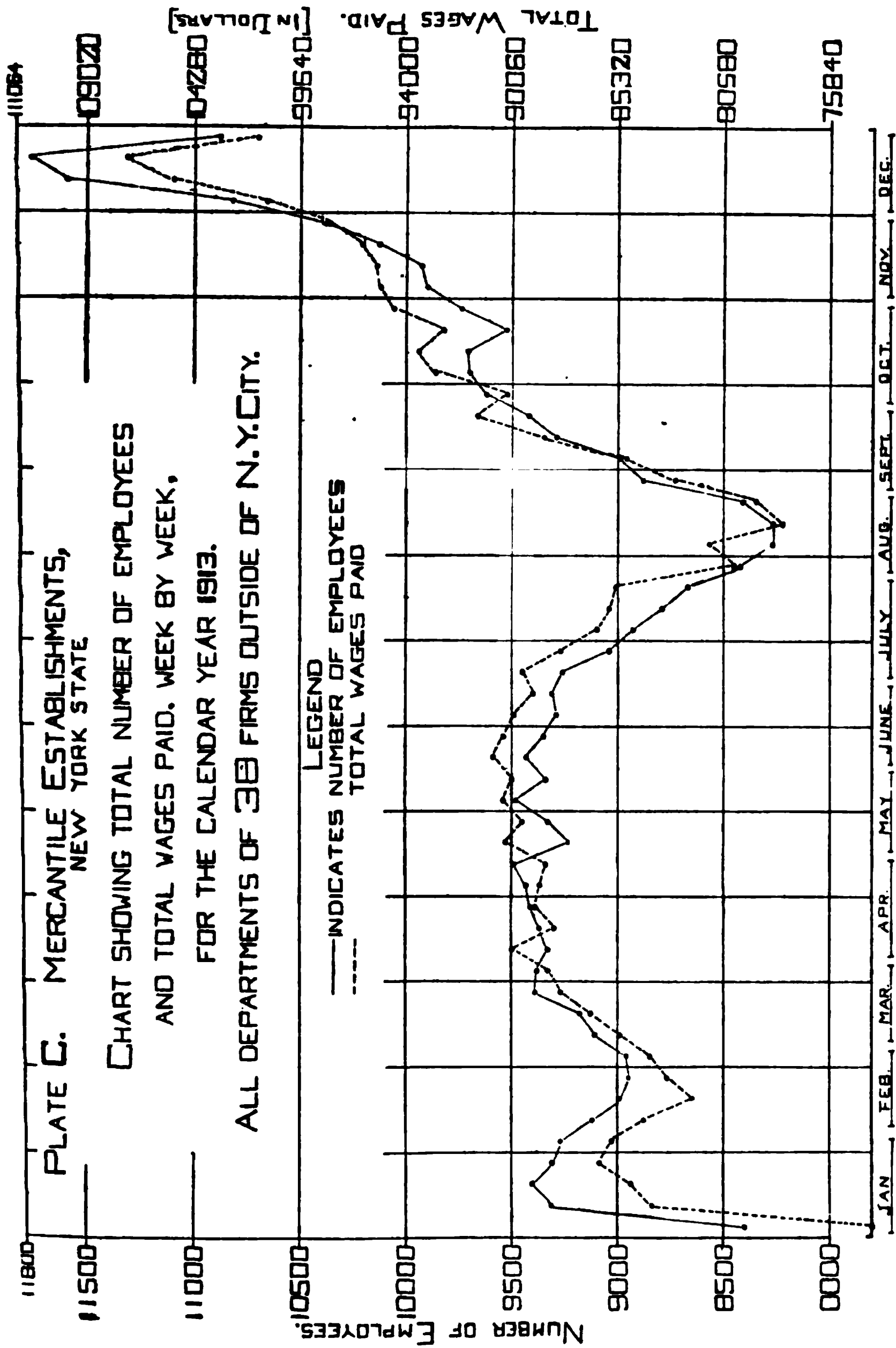
The accompanying chart shows the fluctuation of employment and wages in 38 representative stores, in 8 different localities, outside of New York City, employing from 18 to 1,240 persons each. In a composite presentation such as this, much that would show up forcibly if one locality or establishment were studied, is necessarily obliterated. The general facts are, however, worth noting.

The largest number of persons employed in any one week was 11,726, and the smallest number 8,266. The average number of persons employed during the year was 9,400. Similarly the largest amount paid in wages during one week was \$107,409, and the smallest amount, \$77,966. The average wage payments per week amounted to \$89,134. For the calendar year the average weekly wage of employees was \$9.48.

Disregarding the entries at each end of the year, for which data are incomplete, we note that the minimum both of employment and of wage payments occurred during August, and the maximum in December. Comparing these with the averages for the year, we find that at its lowest point the number of employees is 11.8 per cent below the average, and that of wage payments 12.5 per cent. At their highest points employment and wages are 24.7 per cent and 20.5 per cent above their respective averages.

Comparing the highest and lowest points we find that the smallest number of persons employed during the year is 69.6 per cent of the highest number, and the smallest wage payment for one week is 72.6 per cent of the highest amount paid out. In other words, while there were employed, at the height of the holiday season, 44 per cent more persons than at the slackest time, the highest amount paid out in wages shows an increase of 38 per cent over the lowest amount.

The relation between the two curves, representing numbers employed and wages paid, indicates that, on the whole, as numbers are increased earnings relatively rise. However, at the time of maximum employment, in December, so many additional low-paid workers are taken on that the average is thereby considerably reduced.



From the beginning of the year until well towards summer, with the exception of a spurt at Easter time, the broken line, representing earnings, is steadily below the solid line representing numbers employed. During the summer, while the number of employees declines, a higher average of earnings is maintained. This is partly accounted for by the fact that the smaller number of persons retained during the period of dull trade are the better paid and more steadily employed individuals. This group, furthermore, includes those who receive paid vacations, and though they may be counted as absent during their vacation weeks, their wages are included in the totals for these periods. In some cases employees entitled to a paid vacation prefer to work uninterruptedly and thus draw double pay during their vacation period.

In New York City 18 of the largest department stores were asked to register the greatest, smallest and most usual number of employees on their payrolls during the year 1913. The normal forces of these stores amounted to 41,828 persons; the maximum before Christmas totaled 55,587; and the lowest ebb in mid-summer fell to 35,322 for all establishments. In other words, the fluctuation in the total number of employees was from 33 per cent above normal to $15\frac{1}{2}$ per cent below—a difference of over 20,000 persons, or practically 50 per cent of the regular force.

The stores vary greatly in regard to this rise and fall in numbers. One establishment on the list did not change 18 per cent throughout the year. Another increased its force over 50 per cent before Christmas, and a third cut down its personnel nearly 30 per cent below the usual quota during the slack season. Some stores vary as much as 66 per cent between seasons.

SHIFT

In 11 large New York City stores with an average total force of 27,264, there were added during the course of a year 44,308 persons, and 41,859 left or were dropped. In other words, more than once and a half as many people flowed through the stores as are usually employed in them at one time.

The stores differ greatly in the extent of the shift among their employees. In one establishment the change amounts to only

about 20 per cent of the normal force. In practically all the others it is 100 per cent or over; in one it amounts to over three times the average number employed at one time.

We entered the number of weeks worked by all employees who appeared on the payrolls of an up-state store during an entire year. The following table shows the length of time they stayed with that establishment. The working force of this store last spring was slightly over 1,100 persons.

TABLE XIX
WEEKS WORKED IN A YEAR IN ONE UP-STATE STORE

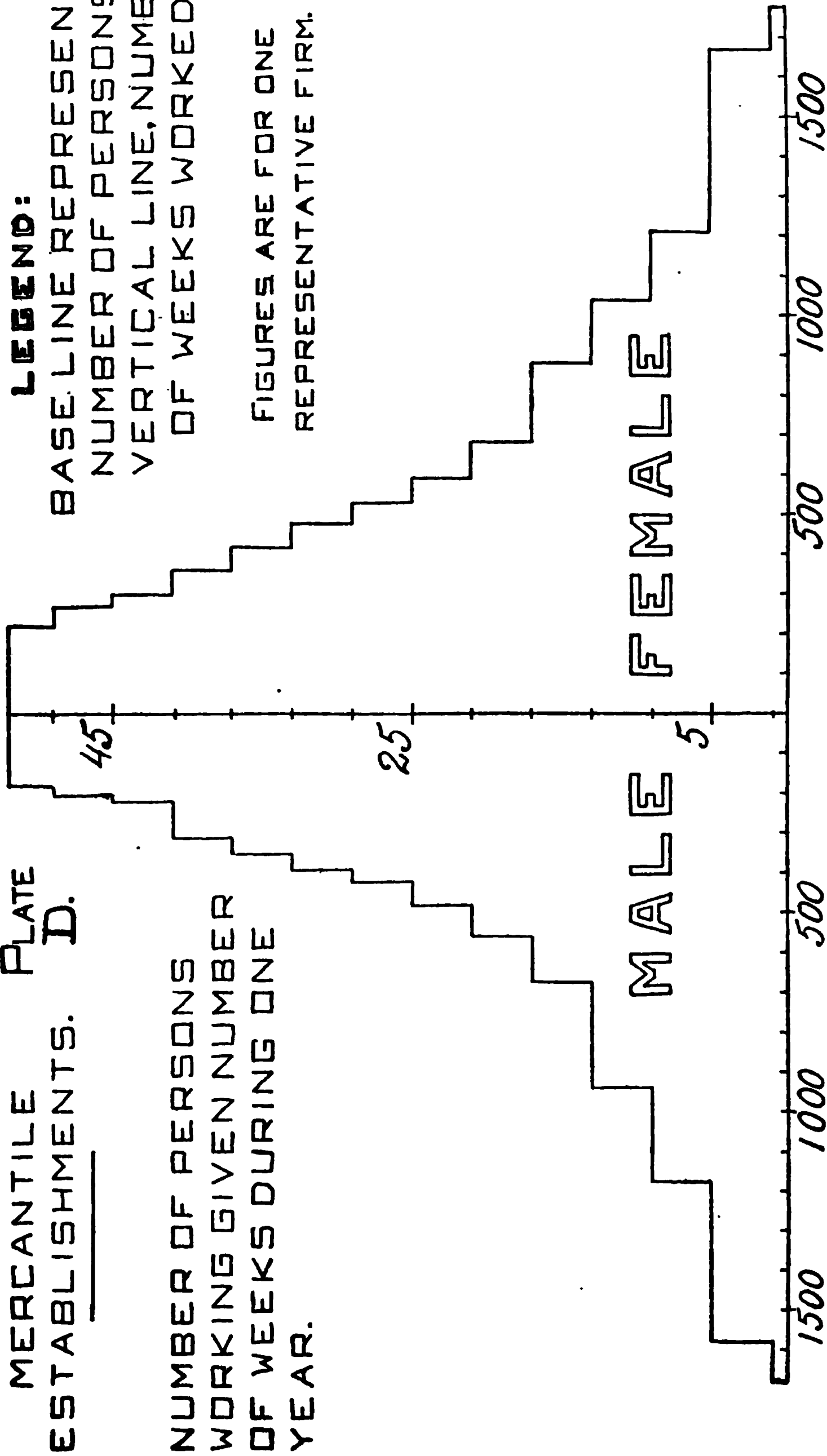
WEEKS WORKED	Male	Female	Both	Cumulative per cent of all
- 1.....	107	106	213	6.
1- 4.....	407	461	868	31.
5- 8.....	232	177	409	43.
9-12.....	165	151	316	52.
13-16.....	217	204	421	64.
17-20.....	76	87	163	69.
21-24.....	57	65	122	73.
25-28.....	31	53	84	75.
29-32.....	39	58	97	78.
33-36.....	44	57	101	81.
37-40.....	87	63	150	85.
41-44.....	14	29	43	86.
45-48.....	25	48	73	88.
49-52.....	182	218	400	100.
Total.....	1,683	1,777	3,460	100.

It will be seen from this table that over one-fourth of the people stayed from 1 to 4 weeks — probably the holiday contingent. But one-half were employed less than 3 months and three-fourths less than 7 months. Less than 12 per cent had been with the firm 11 months or more. The accompanying graph shows the relative duration of employment more clearly. (See Plate D.)

It is generally supposed that only the very cheap help shift; whereas the better people in all departments remain. One employer stated that one-third of his help was fluid labor, coming and going very rapidly; while the remainder was relatively steady. This seems to be usually the case; but the wages of the persons listed in the preceding table are pretty well distributed from \$3 to \$30, showing that very different grades of people came and went during the course of the year.

MERCANTILE PLATE
ESTABLISHMENTS. D.

LEGEND:
BASE LINE REPRESENTS
NUMBER OF PERSONS:
VERTICAL LINE, NUMBER
OF WEEKS WORKED.
FIGURES ARE FOR ONE
REPRESENTATIVE FIRM.



TIME LOST

This shifting about naturally causes loss of time and wages between jobs. Personal reasons, such as illness, also throw people out. In order to discover the extent of this loss, we inquired of more than a 1,000 women as to their experience during the last 12 months. The following table shows the distribution of the instances recorded by cause and duration:

TABLE XX
TIME LOST DURING ONE YEAR FOR INDUSTRIAL AND PERSONAL REASONS

LOST TIME	CAUSE OF LOST TIME						
	INDUSTRIAL			PERSONAL			
	Slack work	No job	Total	Illness	Family trouble	Other reasons	Total
<i>Days</i>							
Less than 1.....	.....	.....	.....	6	.....	3	9
1- 6½.....	2	6	8	227	3	79	309
7-13.....	8	11	19	87	4	26	117
14-20.....	2	5	7	36	2	6	44
21-27.....	3	5	8	23	.....	5	28
28-34.....	4	1	5	14	2	1	17
<i>Weeks</i>							
6.....	1	1	2	8	1	.....	9
7.....	.....	.....	.....	7	.....	1	8
<i>Months</i>							
2.....	2	9	11	9	3	3	15
3.....	1	7	8	5	3	1	9
4.....	3	3	6	1	.....	.....	1
5.....	.....	.....	.....	.....	.....	.....	.....
6.....	.....	.....	.....	2	.....	2	4
7.....	.....	.....	.....	2	.....	1	3
8.....	.....	2	2	1	.....	1	2
9.....	.....	.....	.....	1	.....	.....	1
10.....	.....	.....	.....	1	.....	.....	1
Total.....	26	50	76	430	18	129	577

It should be understood that persons who did not report any time lost must not be considered as reporting no time lost. Sometimes they forgot how long they were away. Still 653 instances are recorded for 1,036 women. In 25 cases a person had suffered loss both from industrial and from personal causes.

The most usual period of unemployment due to slack work or absolute loss of position was from 1 to 2 weeks. The majority of

those who were out for illness or other personal reasons lost a week or less. Sickness was by far the most frequent cause of withdrawal.

Holidays and vacations also occasion some loss. In the main, however, all important legal holidays are allowed with pay. But we have statements from employees up-state, that on 6 days when the stores are closed they receive no pay.

Vacations are upon various bases. Four hundred and eighty-two women reported vacations with pay; 176, vacations without pay, and 589 either did not report any vacation or had none. Two hundred and nineteen received 1 or 2 weeks with full pay, and 186 had two weeks with half pay. It seems to be a general rule that those who have been in the store a year or more, or those in higher positions secure vacations with pay. We are informed that vacations without pay during the dull season are compulsory for salespeople in some stores.

ANNUAL EARNINGS

With so much understanding of general conditions of business in retail stores, we may now turn to the most difficult and critical question in regard to wages, namely, the determination of total annual or average weekly earnings of persons in stores. In order to answer this question adequately, the only method is to take the receipt accounts of a number of persons for a year. But since this is very slow and uncertain work, we took from the payrolls the earnings of all persons who appeared on the books, back week by week for a year. So we know what they got while with the firm where they were recorded, but beyond that we could not attempt to trace them.

The following table shows the number of persons who averaged given amounts per week according to the length of time they had worked. The figures were taken for 7 establishments up-state. Detailed tables by departments and occupations are given in the statistical appendix.*

* See Tables, Nos. 160 and 161.

TABLE XXI
AVERAGE WEEKLY EARNINGS FOR EACH SEX BY WEEKS WORKED IN ONE YEAR -- DATA FOR 7 FIRMS UP-STATE

AVERAGE WEEKLY EARNINGS	NUMBER OF WEEKS WORKED												AVERAGE WEEKLY EARNINGS		
	1 to 4		5 to 8		9 to 12		13 to 16		17 to 20		21 to 24			25 to 28	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		Male	Female
Dollars															Dollars
1 50- 1 99...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1 50- 1 99
2 00- 2 49...	...	...	...	1	...	3	...	...	...	...	...	...	...	...	2 00- 2 49
2 50- 2 99...	...	3	1	4	...	1	...	...	...	...	...	...	...	4	2 50- 2 99
3 00- 3 49...	...	1	...	1	...	...	...	...	...	...	...	...	...	1	3 00- 3 49
3 50- 3 99...	2	...	...	...	2	2	...	3	...	...	...	...	...	1	3 50- 3 99
4 00- 4 49...	...	3	...	1	...	3	...	1	...	...	...	...	...	1	4 00- 4 49
4 50- 4 99...	...	3	...	7	...	5	...	2	...	4	...	...	...	7	4 50- 4 99
5 00- 5 49...	1	5	...	2	...	3	...	1	...	...	...	...	2	...	5 00- 5 49
5 50- 5 99...	...	...	...	1	...	4	...	2	...	4	...	...	...	4	5 50- 5 99
6 00- 6 49...	...	2	...	3	...	4	...	2	...	1	...	...	1	1	6 00- 6 49
6 50- 6 99...	1	2	...	1	...	4	...	2	...	2	...	...	...	2	6 50- 6 99
7 00- 7 49...	...	1	1	1	...	1	...	1	...	1	...	...	...	3	7 00- 7 49
7 50- 7 99...	...	...	...	1	...	2	...	3	...	5	...	...	3	1	7 50- 7 99
8 00- 8 99...	1	1	...	...	...	5	...	1	...	...	...	...	...	1	8 00- 8 99
9 00- 9 99...	1	3	...	1	...	1	...	1	...	1	...	...	1	1	9 00- 9 99
10 00-10 99...	...	...	1	2	...	1	4	...	...	...	...	...	...	...	10 00-10 99
11 00-11 99...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	11 00-11 99
12 00-12 99...	1	...	...	...	...	...	...	2	...	...	...	...	...	1	12 00-12 99
13 00-13 99...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	13 00-13 99
14 00-14 99...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	14 00-14 99
15 00-15 99...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	15 00-15 99
16 00-17 99...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	16 00-17 99
18 00-19 99...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	18 00-19 99
20 00-24 99...	...	...	1	...	...	...	2	...	...	...	...	...	...	1	20 00-24 99
25 00-29 99...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	25 00-29 99
30 00-34 99...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30 00-34 99
35 00 and over.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	35 00 and over
Total.....	7	24	5	26	10	40	14	21	7	18	9	15	10	29	Total.....
Median.....	\$6 75	\$5 20	\$8 50	\$4 93	\$6 00	\$5 87	\$11 00	\$6 37	\$11 50	\$6 50	\$13 50	\$7 67	\$7 83	\$5 56	Median.....

APPENDIX IV—WAGE INVESTIGATION

TABLE XXI
AVERAGE WEEKLY EARNINGS FOR EACH SEX BY WEEKS WORKED IN ONE YEAR — DATA FOR 7 FIRMS, UP-STATE — (concluded)

AVERAGE WEEKLY EARNINGS	NUMBER OF WEEKS WORKED												AVERAGE WEEKLY EARNINGS		
	29 TO 32		33 TO 36		37 TO 40		41 TO 44		45 TO 48		49 TO 52			TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		Male	Female
<i>Dollars</i>															<i>Dollars</i>
1 50- 1 99	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1 50- 1 99
2 00- 2 49	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	2 00- 2 49
2 50- 2 99	.....	1	1	1	.....	.....	1	.....	.....	.....	.....	.....	5	23	2 50- 2 99
3 00- 3 49	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	10	3 00- 3 49
3 50- 3 99	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	26	3 50- 3 99
4 00- 4 49	.....	7	.....	3	.....	.....	1	.....	.....	.....	.....	.....	3	30	4 00- 4 49
4 50- 4 99	1	7	.....	3	.....	.....	1	.....	.....	.....	.....	.....	7	73	4 50- 4 99
5 00- 5 49	1	5	.....	5	.....	.....	2	.....	.....	.....	.....	.....	8	54	5 00- 5 49
5 50- 5 99	2	8	.....	6	.....	.....	1	.....	.....	.....	.....	.....	5	116	5 50- 5 99
6 00- 6 49	.....	7	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	4	65	6 00- 6 49
6 50- 6 99	.....	6	.....	2	.....	.....	1	.....	.....	.....	.....	.....	4	80	6 50- 6 99
7 00- 7 49	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	63	7 00- 7 49
7 50- 7 99	1	8	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	13	84	7 50- 7 99
8 00- 8 99	1	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	74	8 00- 8 99
9 00- 9 99	2	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	60	9 00- 9 99
10 00-10 99	1	6	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	40	10 00-10 99
11 00-11 99	5	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	33	11 00-11 99
12 00-12 99	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	33	12 00-12 99
13 00-13 99	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	14	13 00-13 99
14 00-14 99	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46	13	14 00-14 99
15 00-15 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	10	15 00-15 99
16 00-17 99	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42	8	16 00-17 99
18 00-19 99	2	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	7	18 00-19 99
20 00-24 99	3	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	55	10	20 00-24 99
25 00-29 99	5	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	5	25 00-29 99
30 00-34 99	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	3	30 00-34 99
35 00 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	35 00 and over
Total.....	40	94	7	25	10	31	7	30	9	63	348	527	483	943	.....Total
Median.....	\$12 67	\$6 75	\$10 50	\$5 95	\$12 00	\$5 93	\$9 50	\$6 50	\$13 50	\$7 96	\$14 86	\$7 27	\$14 27	\$6 91	.....Median

In general it appears that the persons who have worked longest average somewhat higher than those who stay but a short time. The following table gives the actual amounts earned in a year by those who had been with the same seven firms for 43 weeks (10 months) or over. Two-thirds of the persons on the payrolls had been with the firms that long. Naturally these are the more responsible and permanent employees.

TABLE XXII
TOTAL ANNUAL EARNINGS FOR ALL EMPLOYEES WORKING 43 WEEKS OR
MORE DURING PREVIOUS 12 MONTHS — DATA FOR 7 FIRMS UP-STATE

AMOUNTS	MALE		FEMALE	
	Number	Cumulative per cent	Number	Cumulative per cent
Less than \$200...	7	2	24	4
\$200- 249.....	2	2.5	46	12
250- 299.....	5	4	82	25
300- 349.....	4	5	110	44
350- 399.....	8	7	103	61
400- 449.....	12	10	54	70
450- 499.....	12	14	47	77
500- 549.....	13	17	41	84
550- 599.....	21	23	19	87
600- 649.....	38	34	24	91
650- 699.....	20	39	9	93
700- 749.....	32	48	12	95
750- 799.....	35	58	11	97
800- 899.....	38	68	6	98
900- 999.....	35	78	6	98.7
1,000-1,099.....	28	86	3	99.2
1,100-1,199.....	16	90	.....	.....
1,200-1,299.....	11	93	2	99.5
1,300-1,399.....	8	96	2	99.8
1,400-1,499.....	4	97	1	99.9
1,500-1,599.....	5	98	1	100
1,600-1,799.....	5	99.5	.....	.....
1,800-1,999.....	1	99.7	.....	.....
2,000-2,499.....	.....	.....	.....	.....
2,500-2,999.....	1	100	.....	.....
Total.....	361	100	603	100

It is clear from this table that the majority of male help earned between \$600 and \$1,000 a year. More than half earned less than \$800. The majority of female help earned between \$250 and \$500. More than half earned less than \$400.

This distribution on the basis of 43 weeks or over may not be convincing to some persons. Accordingly we have calculated for all persons in the same firms their total earnings for 52 weeks,

both on the basis of the rate of payment last recorded and also upon the basis of their average weekly earnings during the time they were engaged. The following table shows a comparison of percentages.

TABLE XXIII
CALCULATED ANNUAL EARNINGS — DATA FOR 7 FIRMS UP-STATE

AMOUNTS	MALE				FEMALE			
	BASED ON RATES		BASED ON EARNINGS		BASED ON RATES		BASED ON EARNINGS	
	Number	Cumulative per cent	Number	Cumulative per cent	Number	Cumulative per cent	Number	Cumulative per cent
Less than \$200.....	13	2.7	17	3.6	52	5.5	57	6.2
\$200- 249.....	9	4.6	8	5.3	32	8.9	72	14.
250- 299.....	12	7.	10	7.4	92	18.7	131	28.2
300- 349.....	8	8.7	9	9.3	195	39.4	160	45.5
350- 399.....	10	10.8	14	12.3	142	54.4	135	60.2
400- 449.....	18	14.5	13	15.1	131	68.3	106	71.7
450- 499.....	19	18.4	18	18.9	72	76.	65	73.8
500- 549.....	27	24.	20	22.2	77	84.1	51	84.2
550- 599.....	7	25.5	18	26.8	20	86.3	28	87.2
600- 649.....	60	38.	48	32.1	43	90.8	36	91.3
650- 699.....	24	42.8	29	43.3	11	92.	21	93.5
700- 749.....	34	50.	32	50.	19	94.	10	94.5
750- 799.....	50	60.3	50	60.8	22	96.	17	96.4
800- 899.....	43	69.2	39	68.9	7	97.	6	97.
900- 999.....	46	78.7	45	78.5	8	98.	9	98.
1,000-1,099.....	35	86.	33	85.3	8	98.8	9	99.
1,100-1,199.....	23	90.6	23	90.2	3	99.	1	99.1
1,200-1,299.....	2	91.	9	92.	1	99.1	1	99.2
1,300-1,399.....	22	95.6	16	95.5	6	99.8	4	99.6
1,400-1,499.....	4	96.5	6	96.8	.....	.....	1	99.7
1,500-1,599.....	10	98.5	8	98.5	1	99.9	2	99.9
1,600-1,799.....	1	98.6	2	98.8	1	100	1	100.
1,800-1,999.....	5	99.8	4	99.8	.....	.....	.....	.....
2,000-2,499.....	.....	.....	.....	.....	.....	.....	.....	.....
2,500-2,999.....	1	100	1	100	.....	.....	.....	.....
Total.....	483	100	472	100	943	100	923	100

The most noticeable feature about this table is that incomes calculated on average earnings run lower for both sexes. This is very evident in the case of females. Only 19 per cent of the women and girls would earn less than \$300 a year if we multiplied their weekly rate by 52. But if we take 52 times their average earnings we find that 28 per cent would fall below that amount. From this it is evident that incomes based on rates are too high.

Now if we compare this table with the one preceding, we note the same tendency of low earnings to predominate here. For instance only 10 per cent of the steady male workers actually earned less than \$450 in 43 to 52 weeks. But 15 per cent of all male employees in these stores could not ordinarily make so much in 52 weeks. This makes it clear that the steady help are paid higher than the general run of employees.

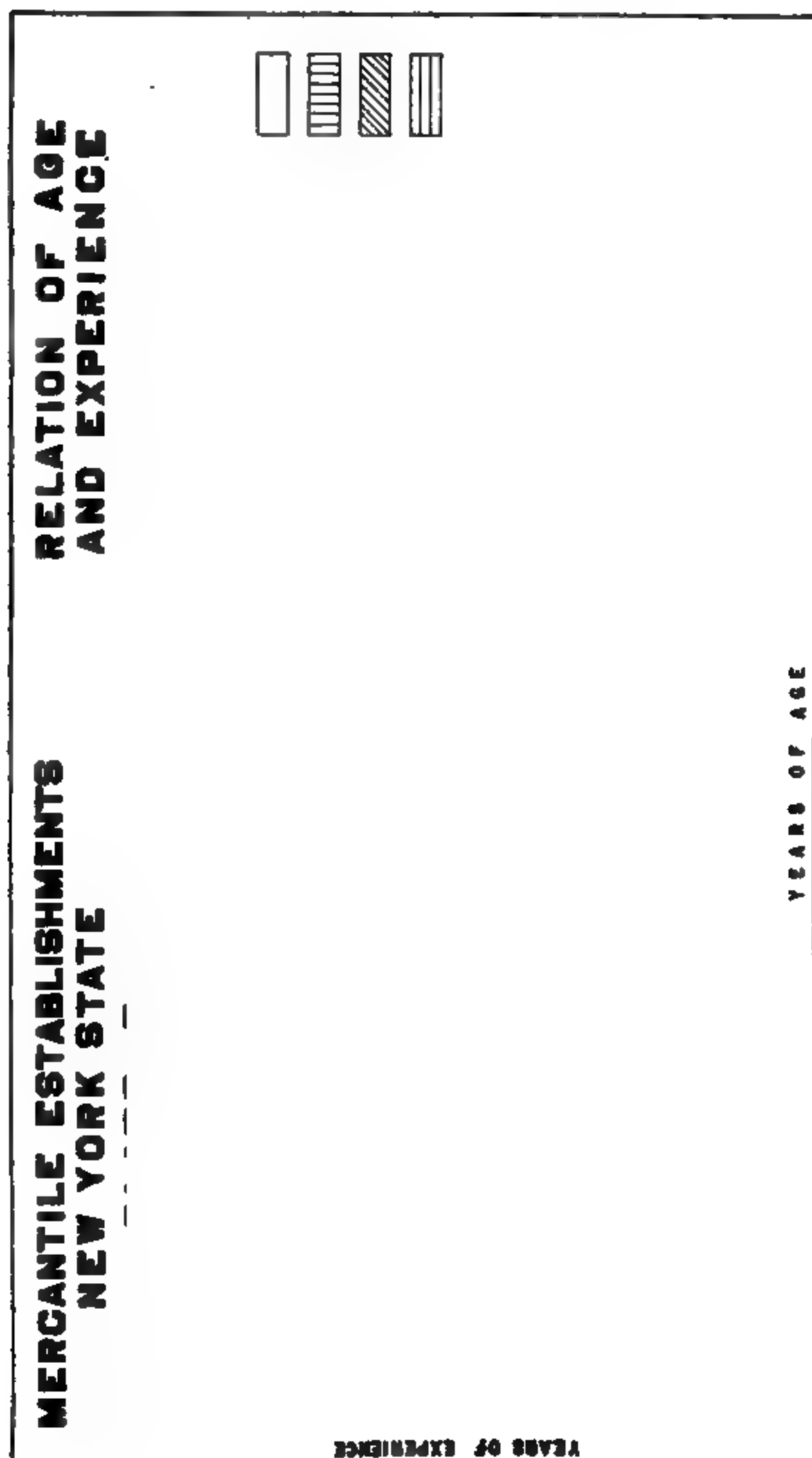
In the case of women we find that actual earnings and those calculated on average weekly receipts run fairly close together. The contrast, therefore, between actual earnings and income calculated upon rates is very considerable among the low paid help. For example, 54 per cent of the girls would be reckoned as likely to receive less than \$400 a year. As a matter of fact 61 per cent of the best paid women workers fell below this figure. This confirms our remarks about deductions for loss of time among female help.

EXPERIENCE

Wages depend not only upon maturity but also upon experience gained in the business. A person may be old in years and very young in understanding of the trade. Age in both respects necessarily advances together, but there are interesting variations.

The accompanying graph shows for each sex, years at work in shops and with the firm where recorded, according to age. The outer sides of the pyramid indicate legal working years according to the present standard. That is, at 16 years of age, a boy or girl might have been working 2 years, at 18, 4, etc. Our investigation of this matter brought out the fact that 81 male employees and 39 women and girls had begun to work for wages before the age of 14. It should be remarked that these are persons now over legal age, some of whom began to work elsewhere. (See Plate E.)

It is clear from the white space next to the outside of the pyramid, that some men and women did not begin to work until comparatively late in life. Massing the material for the entire number it appears that boys commence to earn earlier than girls and keep on working more continuously. Men do not as a rule remain idle 1 year in 15; but women appear to have been out of business about one-fifth of their working years.



The next space down indicates the usual proportion of years that have been spent in other lines than retail mercantile establishments. It appears from this that among the older men about three-eighths of their industrial careers had been spent in different occupations. The vocations of younger men had not been so varied. Out of 164 male employees whose industrial histories contained specific information upon this point, 74, or 45 per cent had been engaged in one or more other lines of work before going into a store. A list of these occupations shows experience of varied kinds from mining to the writing of insurance. Many, however, were in related lines of work. Among industrial causes responsible for the change, low wages and slack periods appear most frequently. On the personal side, ill health and dislike of the previous occupations are the reasons most often mentioned.

On the women's side, rather more time in proportion appears to have been spent at other work. But this is not true of the younger women, who constitute the great majority of all female help. Out of more than 1,200 female employees who gave information upon this matter, 861 (70 per cent) had never been engaged in any other business. Of the others, 282 (23 per cent) had been in several. One girl had tried 4 different trades within her first year of business experience. The reasons for change most often given by men, i. e., slack seasons, low pay, ill health and dislike of the work, were also alleged by most women.

The division with the diagonal hatching shows the prevailing distribution of years worked in other stores. Among older men it amounts to 40 per cent or 60 per cent of their working years. Out of 72 men who reported in detail upon this matter, 18 (25 per cent) had been with one firm only; 21 (29 per cent) had been with two; and 33 (41 per cent) had been with 3 or more. One man who had been 9 years in the retail trade, had held 7 different jobs during that time.

Among women, proportionately less time had been spent with other firms, as shown by the graph. Out of 819 women who reported specifically concerning changes, more than half (426) were still working with the firm with which they began their wage earning. A striking exception is noted in the case of one girl who had held 9 jobs in 4 years.

Another feature of interest in considering the experience of workers is the number of distinct lines or occupations which they have followed within the same business. Out of 989 women who reported on this matter, 363 had been engaged in 2 or more capacities. Over 100 had risen through 3 or 4 grades. Among men this shift was not so marked.

To sum up the matter of trade experience we may present the following table:

TABLE XXIV
MEDIAN AGE AND YEARS OF EXPERIENCE FOR ALL STORE EMPLOYEES

	Age	At work	In trade	With firm
Male.....	31 yrs., 6 mos.	14 yrs., 3 mos.	7 yrs., 6 mos.	2 yrs., 5 mos.
Female.....	22 yrs., 9 mos.	5 yrs., 10 mos.	4 yrs., 4 mos.	2 yrs., 8 mos.

EARNINGS AND EXPERIENCE

The relation between years of experience and weekly earnings is shown in the following tables and the accompanying graph:

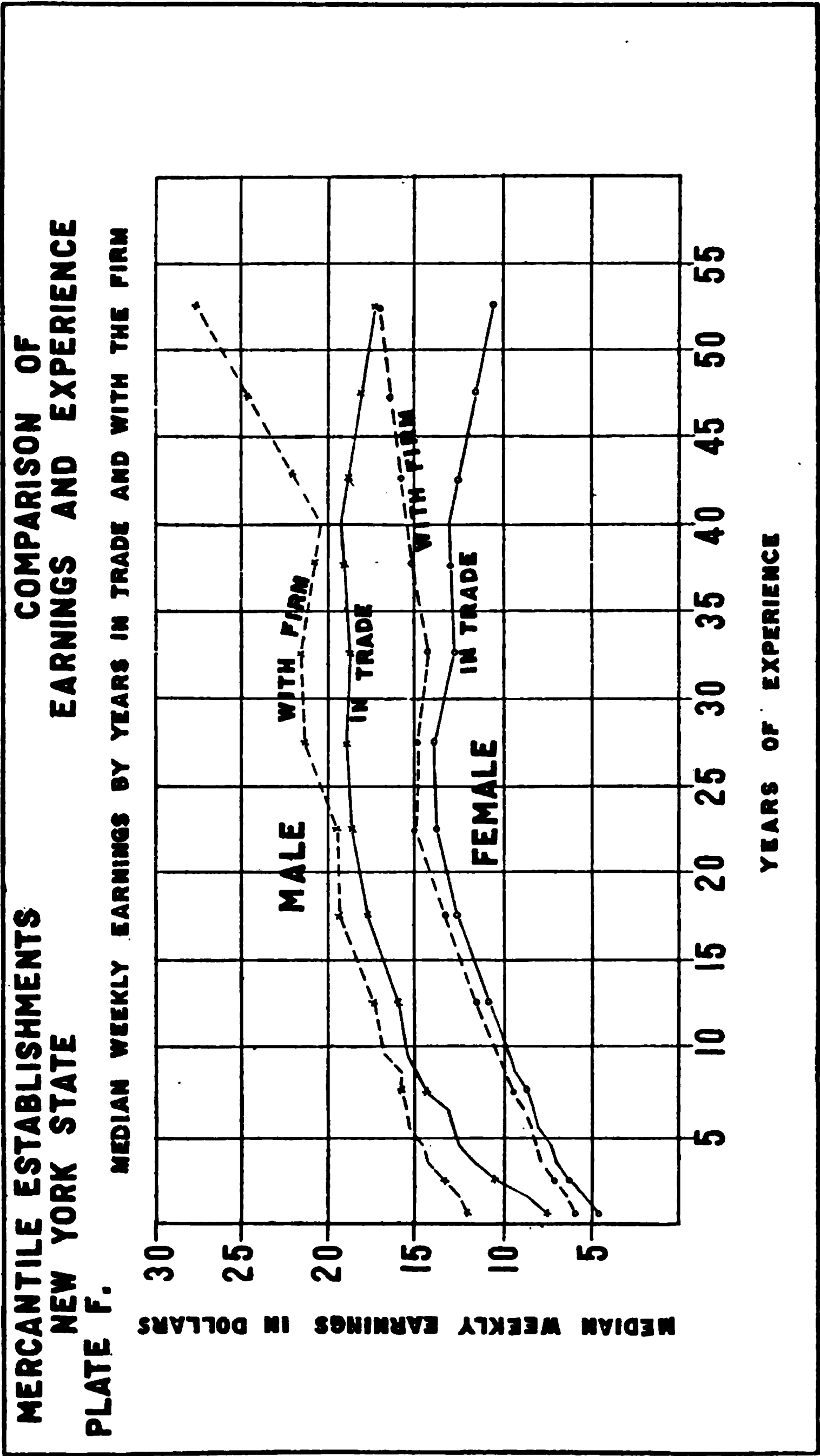
TABLE XXV
WEEKLY EARNINGS AND TRADE EXPERIENCE — NUMBER AND CUMULATIVE PER CENT OF ALL EMPLOYEES WITH MEDIAN EARNINGS BY YEARS IN TRADE BY EACH SEX

YEARS OF EXPERIENCE	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1 year.....	2,868	14.6	\$7 61	5,029	16.7	\$4 71
1 year.....	1,629	22.4	8 66	3,427	27.5	5 45
2 years.....	1,303	28.9	10 41	2,972	37.2	6 30
3 years.....	1,262	35.2	11 45	2,747	46.1	7 01
4 years.....	966	40.1	12 29	2,447	54.3	7 33
5 years.....	953	44.8	12 72	1,981	60.7	8 06
6 years.....	753	48.6	13 01	1,743	66.3	8 42
7 years.....	717	52.2	14 22	1,635	71.5	8 83
8 years.....	759	56.	14 78	1,412	76.1	9 35
9 years.....	450	58.2	15 33	982	79.3	9 66
10-14 years.....	2,576	72.	15 96	3,588	91.	10 82
15-19 years.....	1,763	79.8	17 72	1,536	96.	12 51
20-24 years.....	1,485	87.2	18 58	766	97.5	13 74
25-29 years.....	1,104	92.7	18 93	282	99.5	13 93
30-34 years.....	811	96.8	18 66	102	99.8	12 67
35-44 years.....	646	99.8	19 14	44	99.9	13 00
45 years and over.....	153	100.	17 20	7	100.	10 50
Total recorded.....	20,168	100.	\$13 68	30,700	100.	\$7 81

TABLE XXVI

WEEKLY EARNINGS AND TERM OF EMPLOYMENT — NUMBER AND CUMULATIVE PER CENT OF ALL EMPLOYEES WITH MEDIAN EARNINGS BY YEARS WITH FIRM FOR EACH SEX

YEARS WITH FIRM	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1 year.....	6,393	31.1	\$11 94	10,002	31.9	\$6 04
1 year.....	2,960	45.4	12 36	5,114	48.2	6 43
2 years.....	2,090	55.7	13 15	3,656	59.8	7 16
3 years.....	1,751	64.1	14 15	3,056	69.6	7 94
4 years.....	1,090	69.4	14 46	1,986	71.	8 13
5 years.....	843	73.5	15 17	1,831	80.6	8 45
6 years.....	648	77.7	15 32	1,119	83.9	8 95
7 years.....	695	80.	15 76	1,098	87.1	9 42
8 years.....	581	82.9	15 64	787	89.7	9 90
9 years.....	394	84.8	16 60	501	91.4	10 24
10-14 years.....	1,520	92.2	17 24	1,707	96.8	11 44
15-19 years.....	806	96.2	19 20	616	98.7	13 12
20-24 years.....	379	98.	19 40	262	99.6	14 95
25-29 years.....	214	99.	21 30	104	99.8	14 83
30-34 years.....	132	99.7	21 55	31	99.9	14 17
35-44 years.....	64	99.9	20 40	11	99.9	15 50
45 years and over.....	7	100.	27 50	1	100.	17 00
Total recorded.....	20,567	100.	\$13 67	31,382	100.	\$7 32



Several points are at once apparent from the figures here given:

First: Earnings increase with years of experience in the business, but at a diminishing rate. The typical male employee, starting at \$7.61, is advanced about \$1 a year for the first 5 years in the trade; approximately half that amount for each of the next 5; and rises more slowly during successive periods, until after 45 years of business experience, he attains \$19 a week. After that his earnings gradually fall off. For women and girls the beginning wage is lower; the rate of increase slower but more uniform; and the period of increasing earnings shorter. After 25 years of work in the trade the typical female employee attains nearly \$14 a week; and then slowly drops down and out. Year for year a woman's experience counts for less than a man's in terms of wages.

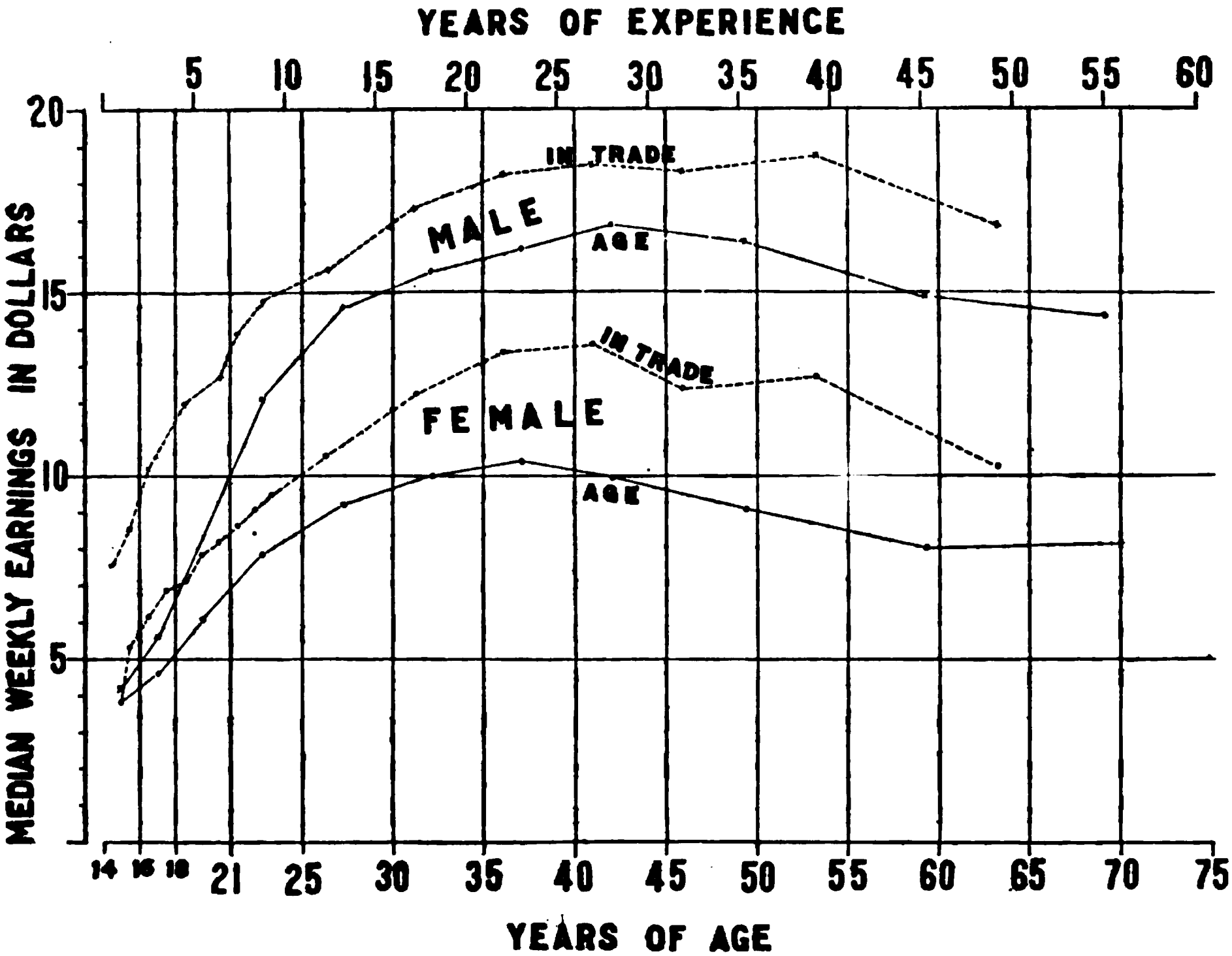
Second: Years with the firm count more for income than time spent in other establishments. This appears quite uniformly for both sexes, as shown by the graph, especially for the few survivors of long service. Those who are retained over 40 years seem to rise in positions of minor responsibility.

Third: The preceding tables show that dropping out is greatest among the low paid help. Hence many persons do not remain long enough to secure wages representative of the business as a whole, while those employees who stick, pull up the general average. At the same time the birds of passage bring down the level for the whole trade. Men and women differ considerably in this respect. Male employees attain the median wage for their sex after 7 years in the trade or 2 years with the firm. Females arrive at their ordinary level of earnings after 4 years in business or 2 years in the same establishment. By the time mentioned half of each sex has dropped out of the business. The tables given show the survivors at each age of business life and expected earnings for their terms of experience. Such data might readily be further analyzed and developed into wage insurance charts.

On comparing weekly earnings with years of age and years of experience as shown in the accompanying graph, it is clear that experience in the trade counts for more than mere maturity of age. It is true, however, that persons who have had but a few years of trade experience may be comparatively well advanced in age, having entered the store after some years of experience in other lines of work. Still the difference here shown makes it clear that training in general counts for more than age.

MERCANTILE ESTABLISHMENTS
NEW YORK STATE
PLATE G.

COMPARISON OF EARNINGS
BY AGE AND TIME IN TRADE



It may strike the reader, however, that too many varieties of occupations have been massed to make the foregoing conclusions of more than general interest. In order to show how the principle applies to specific lines of work, we have made a special study of 2,000 salesmen and the same number of saleswomen in department and neighborhood stores throughout the State. Only men over 21 and women over 18 years of age were included. The cases were taken from each age group in exact proportion to its relative weight in the total number of salespeople in these classes of stores, and for each locality. There was no selection of wage levels. We may, therefore, consider the following exhibits as good representative types of the relation between experience and weekly earnings for salespeople throughout New York State. Herewith is presented a full distribution table for each sex according to length of time in the business, and a graph to show the general trend of the figures.

TABLE XXVII

ACTUAL EARNINGS OF SALESPeOPLE, BY TIME IN THE TRADE

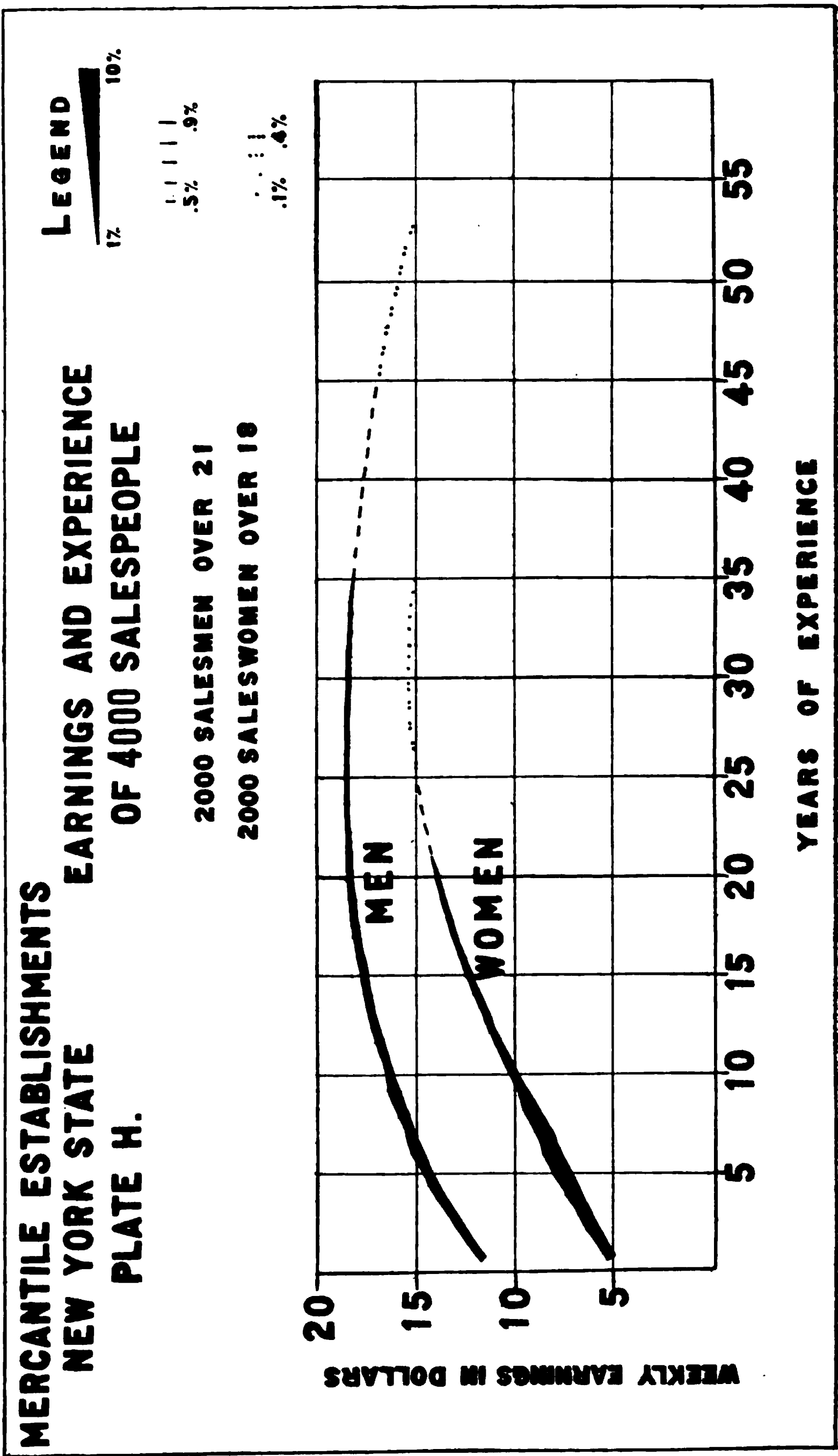
2,000 salesmen over 21 years and 2,000 saleswomen over 18 years, selected in proportion to the number neighborhood stores in the different localities.

WEEKLY EARNINGS	YEARS IN THE TRADE												WEEKLY EARNINGS
	LESS THAN 1		1		2		3		4		5		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.	1	4	.....	5	.....	.....	1	4	1	.....	1	.....	Less than \$3 00
\$3 00-\$3 49.	.....	.....	.....	1	.....	.....	.....	1	1	1	.....	1	\$3 00-3 49
3 50-3 99.	.....	3	.....	5	.....	.....	.....	1	.....	3	.....	.....	3 50-3 99
4 00-4 49.	.....	3	.....	7	.....	.....	.....	1	.....	4	.....	2	4 00-4 49
4 50-4 99.	.....	3	.....	4	.....	.....	.....	2	.....	2	.....	1	4 50-4 99
5 00-5 49.	1	13	.....	7	.....	.....	.....	5	.....	7	.....	3	5 00-5 49
5 50-5 99.	.....	8	.....	12	.....	.....	.....	7	.....	7	.....	9	5 50-5 99
6 00-6 49.	4	26	.....	31	.....	.....	.....	38	.....	42	.....	25	6 00-6 49
6 50-6 99.	1	4	.....	8	.....	.....	.....	5	.....	11	.....	7	6 50-6 99
7 00-7 49.	1	17	.....	39	.....	.....	2	40	.....	35	.....	25	7 00-7 49
30-7 99.	.....	4	.....	8	.....	.....	.....	7	.....	10	.....	9	7 50-7 99
99.	4	9	.....	18	.....	.....	1	42	.....	30	.....	39	8 00-8 99
9 00-9 99.	3	6	.....	5	.....	.....	2	15	.....	21	.....	25	9 00-9 99
10 00-10 99.	6	3	.....	3	.....	.....	10	6	.....	14	.....	11	10 00-10 99
11 00-11 99.	3	.....	.....	.....	.....	.....	.....	3	.....	8	.....	8	11 00-11 99
12 00-12 99.	6	2	.....	1	.....	.....	6	2	.....	4	.....	8	12 00-12 99
13 00-13 99.	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	4	13 00-13 99
14 00-14 99.	1	.....	.....	2	.....	.....	2	2	.....	5	.....	2	14 00-14 99
15 00-15 99.	3	1	.....	1	.....	.....	2	1	.....	8	.....	15	15 00-15 99
16 00-17 99.	1	.....	.....	.....	.....	.....	10	2	.....	9	.....	15	16 00-17 99
18 00-19 99.	1	.....	.....	.....	.....	.....	8	1	.....	1	.....	1	18 00-19 99
20 00-24 99.	5	.....	.....	.....	.....	.....	5	.....	.....	1	.....	1	20 00-24 99
25 00-29 99.	4	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	25 00-29 99
30 00-34 99.	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	30 00-34 99
35 00-39 99.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35 00-39 99
40 00 and over.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Total.....	46	106	32	158	47	167	59	186	61	204	92	182	Total
Median.....	\$11 67	\$6 17	\$12 33	\$6 94	\$13 25	\$7 26	\$14 30	\$7 36	\$13 50	\$7 36	\$14 33	\$8 23	Median

TABLE XXVII
ACTUAL EARNINGS OF SALESWOMEN, BY TIME IN THE TRADE (concluded)

2,000 salesmen over 21 years and 2,000 saleswomen over 18 years, selected in proportion to the number in the several age groups in department and neighborhood stores in the different localities.

WEEKLY EARNINGS	YEARS IN THE TRADE										TOTAL		WEEKLY EARNINGS
	20-24		25-29		30-34		35-44		45 AND OVER		Male	Female	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			
Less than \$3 00.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	19	Less than \$3 00
...\$3 00- 3 49.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	6	...\$3 00- 3 49
... 3 50- 3 99.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	16	... 3 50- 3 99
... 4 00- 4 49.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	22	... 4 00- 4 49
... 4 50- 4 99.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	16	... 4 50- 4 99
... 5 00- 5 49.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	50	... 5 00- 5 49
... 5 50- 5 99.	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3	64	... 5 50- 5 99
... 6 00- 6 49.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	241	... 6 00- 6 49
... 6 50- 6 99.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	61	... 6 50- 6 99
... 7 00- 7 49.	.....	1	.....	.....	.....	3	.....	.....	.....	.....	8	270	... 7 00- 7 49
... 7 50- 7 99.	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	4	59	... 7 50- 7 99
... 8 00- 8 99.	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	20	310	... 8 00- 8 99
... 9 00- 9 99.	1	4	.....	1	.....	.....	.....	.....	.....	.....	23	191	... 9 00- 9 99
...10 00-10 99.	4	3	.....	.....	.....	.....	.....	.....	.....	.....	71	154	...10 00-10 99
...11 00-11 99.	.....	6	.....	1	.....	.....	.....	.....	.....	.....	35	89	...11 00-11 99
...12 00-12 99.	9	5	.....	4	.....	.....	.....	.....	.....	.....	175	131	...12 00-12 99
...13 00-13 99.	7	3	.....	2	.....	.....	.....	.....	.....	.....	80	54	...13 00-13 99
...14 00-14 99.	18	5	.....	3	.....	.....	.....	.....	.....	.....	163	77	...14 00-14 99
...15 00-15 99.	20	11	.....	1	.....	.....	.....	.....	.....	.....	301	71	...15 00-15 99
...16 00-17 99.	33	7	.....	3	.....	.....	.....	.....	.....	.....	290	45	...16 00-17 99
...18 00-19 99.	37	4	.....	1	.....	.....	.....	.....	.....	.....	251	19	...18 00-19 99
...20 00-24 99.	63	2	.....	1	.....	.....	.....	.....	.....	.....	361	23	...20 00-24 99
...25 00-29 99.	16	1	.....	1	.....	.....	.....	.....	.....	.....	119	2	...25 00-29 99
...30 00-34 99.	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	37	3	...30 00-34 99
...35 00-39 99.	3	1	.....	1	.....	.....	.....	.....	.....	.....	10	3	...35 00-39 99
...40 00 and over.	4	1	.....	.....	.....	.....	.....	.....	.....	.....	15	4	...40 00 and over
Total.....	224	56	190	20	150	16	106	1	34	.....	2,000	2,000	.....Total
Median.....	\$18 97	\$14 80	\$18 21	\$14 33	\$18 53	\$16 00	\$17 58	\$12 50	\$16 57	.....	\$16 57	\$8 58	.....Median



After the foregoing remarks no explanation of this table is necessary. It is clear that the principle already stated applies and that only numbers and level of wages vary for specific occupations.

In the graph we have smoothed the curve and indicated by the thickness of the line the relative numbers of each sex who arrive at the successive stages of experience and correlative levels of wages.

CHANGES IN WAGES

In order to discover the advances and deductions made in wages, we entered for all the employees of one large up-state store during a year, the rates at which they were employed in this period. We found that the payrolls showed no change for 84 per cent; reductions for a few; and advances for 15 per cent of the force. The following table shows the amount of the rise.

TABLE XXVIII
RATES CHANGED IN A YEAR, NUMBER OF EMPLOYEES AND AMOUNT OF ADVANCE FOR EACH SEX
DATA FOR ONE REPRESENTATIVE ESTABLISHMENT UP-STATE

	Male	Female	Both	Per cent of total
Total employed	1,683	1,777	3,460	100.
Reduced	2	15	17	.5
No change	1,450	1,458	2,908	84.
Raised	231	304	535	15.5
<i>Amounts of Rise</i>				
\$0 50	15	19	34	1.
1 00	84	199	283	8.2
1 50	11	12	23	.7
2 00	68	58	126	3.6
2 50	2	3	5	.1
3 00	22	8	30	.9
3 50	2	1	3	.1
4 00	4	3	7	.2
4 50	4	.....	4	.1
5 00	11	1	12	.3
6 00	3	.....	3	.1
7 00	3	.....	3	.1
8 00	2	.....	2	.1

The figures show that women and girls had more changes, both up and down, than men. But the amounts of the reductions were greater and the rises were less for female employees. The most ordinary advance in their case was from \$5 and \$6 to \$6 and \$7 a week. The jumps of \$3 and over were among the better paid

women. For men the most usual advance was from a wage of \$10, \$12, and \$15 up to \$1, \$2 or \$3. Among men also the big rises were among those already well paid.

The reductions deserve a word. In the cases of men they were from \$15 and \$16 a week to \$12 and \$11 respectively. The fifteen women and girls noted ranged from a \$6 girl whose wages were cut in half to a \$10 women who lost \$2 a week.

This matter of advance or reduction of wages was made a point in the interviews with individual employees. We discovered many interesting facts regarding their previous trade histories; but inasmuch as these facts do not immediately concern the retail store business, we need not analyze them here. Suffice to say that of 169 men questioned on this point, 137 (81 per cent) were at the time receiving more pay than when they started work; 22 (13 per cent) were receiving the same amount; and 10 (6 per cent) were receiving less. These last ten cases were almost all due to recent beginning in a new line of work.

Out of 1,126 women reporting on this matter, 923 (82 per cent) were receiving more pay than when they started work; 152 (13 per cent) were at the same rates; and 51 (5 per cent) had been reduced. Of course, the amounts vary with age and experience.

As already stated, these returns include the earnings of persons, some of whom had been engaged in other lines of business. The data, therefore, show only in a general way the rise of employees in stores. But we also made a special study of the wages of 240 women and girls in New York City who had spent all their working years in only one store, so that their industrial careers were fairly comparable. The figures are here presented for purposes of discussion.

TABLE XXIX
IMPROVEMENT IN WAGES — 240 WOMEN IN NEW YORK CITY STORES

YEARS WORKED	ADVANCE													Totals	
	None	\$0 50 to \$0 99	\$1 00 to \$1 99	\$2 00 to \$2 99	\$3 00 to \$3 99	\$4 00 to \$4 99	\$5 00 to \$5 99	\$6 00 to \$6 99	\$7 00 to \$7 99	\$8 00 to \$8 99	\$9 00 to \$9 99	\$10 00 to \$10 99	\$11 00 to \$11 99		\$14 00
-1.....	27	3	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
1.....	6	6	15	5	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	33
2.....	4	2	18	7	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
3.....	1	.....	6	7	4	2	.....	.....	.....	.....	.....	.....	.....	.....	20
4.....	2	1	6	9	5	3	1	.....	.....	.....	.....	.....	.....	.....	27
5.....	1	.....	2	2	2	6	.....	2	.....	.....	.....	.....	.....	.....	15
6.....	2	1	1	2	6	3	2	.....	1	.....	.....	.....	.....	.....	18
7.....	1	.....	.....	2	2	4	1	.....	3	.....	.....	.....	.....	.....	13
8.....	.....	.....	2	.....	2	4	1	.....	1	.....	1	.....	1	.....	13
9.....	.....	.....	.....	.....	1	3	2	.....	.....	1	.....	.....	.....	.....	7
10-14.....	1	.....	.....	1	1	2	3	3	3	.....	1	.....	.....	.....	15
15-19.....	.....	.....	.....	1	.....	2	.....	1	.....	1	.....	.....	.....	.....	6
20-24.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	2
25+.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	1	3
Total.....	45	13	56	36	24	30	11	7	10	2	3	1	1	1	240

It will be seen that 19 per cent of these employees had received no increase. But it is also plain that over half of these had been employed less than a year. The woman who worked ten years is receiving \$10 and the one who was with the firm seven years is still getting \$6. Those who worked longer naturally had better expectations of a rise. One woman who started as a cash girl at \$1.75 a week 25 years ago is now receiving \$9 as head of stock. Another, after 16 years of service is getting \$7 as a saleswoman.

The slowness and uncertainty of advancement is one of the most deadening features of service in a big store. Of 171 women who reported on the manner of their promotion, 54 said they secured a rise by demanding it. Eleven reported that they left and went elsewhere to secure better pay. Fifty-two stated that they were advanced according to their increased efficiency; and 27 said length of service and experience counted.

WAGES AND SALES

In order to find what the relative efficiency of salespeople is, we inquired from individuals concerning their ordinary daily and weekly sales. The returns, of course, varied according to seasons and line of goods. Some of the firms thought the girls were guessing; but it seems as though the entries in their sales books, which are the basis of any commissions or premiums, must be known pretty accurately by those who enter the items.

The returns from 127 women in New York City stores vary from \$40 to \$800 a week; but over half of them center between \$50 and \$200. The records for 102 saleswomen in cities in the western part of the State are given in terms of daily transactions, and vary from less than \$5 to \$100, i. e., \$30 to \$600 sales a week. But again the great majority range between \$5 and \$30 a day, or \$30 to \$180 a week. Accordingly, we may say that the transfer of \$30 to \$200 worth of goods a week represents the ordinary transactions of a representative saleswoman. The returns for salesmen range higher, centering between \$10 and \$60 a day, or \$50 to \$350 a week.

We did not correlate these returns with wages, because both items could not be checked up from the books of the firms. We

have learned from the statements of superintendents and accountants, however, that the wages of salespeople will ordinarily run from 4 per cent to 6 per cent of the price of goods sold. This percentage, of course, varies widely from season to season and from department to department. From 2 per cent to 10 per cent may indicate rough limits. But in general, salespeople have to dispose of about \$20 worth of goods to earn a dollar, and must ordinarily surpass this amount to make extra pay.

EARNINGS AND MARRIAGE

As might be expected, persons who are or have been married earn more than those who are single, because the latter are generally younger. The following table shows for each sex the median weekly earnings of those persons who were recorded according to conjugal condition.

TABLE XXX
MEDIAN EARNINGS BY CONJUGAL CONDITIONS

	Male	Female
Single.....	\$11 02	\$7 21
Married.....	15 99	7 82
Widowed or divorced.....	15 34	8 91

Despite this encouraging general picture, we found married men — 458 of them — receiving less than \$10 for a week's work, and 258 widows who received less than \$6. These are unusual cases, but they are the ones that require attention.

EARNINGS AND NATIVITY

Contrary to the general rule, that the foreign born who usually fill the low paid occupations in industry earn less than the native born, we find in the stores as a whole, that the median wage of foreigners slightly surpasses that of the natives. This is to be explained primarily by the difference in age; for as we have seen, there are fewer foreign born youth than native boys and girls in the stores. Those of foreign birth who enter mercantile establishments are usually of mature years, or persons who have lived here long enough to master the language well enough for merchandising.

TABLE XXXI
MEDIAN EARNINGS BY NATIVITY

	Males	Females
Native.....	\$13 32	\$7 30
Foreign.....	14 17	7 50

STATUS OF THE BUSINESS

The expansion of large retail stores within recent years has been remarkable. Elaborate and costly structures housing the products of every country have risen in our cities. For beauty and convenience these stores are among the foremost in the world.

Obviously money is necessary to equip and run these colossal establishments. Recent failures have revealed to the public the huge financial operations involved. Not only have individual firms incorporated as stock companies, but certain groups of merchants have managed chains of stores and held stock in affiliated concerns. The capital stock of one corporation was recently quoted at \$26,500,000, and paid over \$2,000,000 in net dividends. Another concern was capitalized for over \$97,000,000 and paid a dividend of 6 per cent on \$50,000,000 of common stock, which represents "good will."

The revenue and expense items of stores vary widely from place to place and according to the character of goods handled. Local merchants were unwilling to show financial statements, but through the kindness of certain gentlemen, we were enabled to examine the proportion of expenses credited to certain items in representative stores. These can best be summarized by a typical statement such as that which follows:

Prime cost of merchandise.....	70
Less discount at 5%.....	3½
Net cost.....	66½
Marked up to sell at.....	100
Gross profit.....	33½
Selling expense.....	28
Net earnings on sales.....	5½

Discounts vary greatly from nothing at all to 10 per cent or over; 4 to 6 per cent is an ordinary range. The term of discount also varies in extent. It may be long enough in the case

of rapid-selling goods to allow disposal of most of the stock before payment on the same is necessary. It is a common practice also among large buyers to claim discounts even after the expiration of the time allowed. We are told upon good authority that the saving from this source is sufficient to finance the office force of a large concern.

The percentage of mark-up also varies with the character of the goods and the class of patronage. Where selling expenses are high, as in the fashionable New York City stores, this will exceed the figure given above. The range of gross profits also varies considerably. The figure given above is fairly high. It may fall to 27 per cent or 28 per cent and mount to 35 per cent. Selling expenses also vary widely, say from 20 per cent to the figure given above. Of course, net profit depends upon the difference of these two, and will ordinarily range from 3 per cent to 10 per cent, with an average of 5 per cent to 6 per cent.

We shall not here attempt to give a detailed analysis of all the items of expenses, save to say that the sales, overhead, office, and delivery, appear to be the largest items, with advertising and rent bulking very large in the accounts of the great city stores.

One feature must be remarked before we can understand the finances of a mercantile establishment, and that is the rapidity with which this stock is turned over. The liquidation depends upon the character of the goods and varies widely, from women's wear, which is sold out and replenished two or three times each season, to books and housefurnishings, which may be replaced only once or twice a year. On the whole a live firm expects to turn its stock five or six times annually. A very well managed concern may effect a turnover of the value of all the merchandise eight or ten times during a space of twelve months. Here, of course, is where the profits in the business lie, for although a 5 per cent or 6 per cent net profit on the annual business seems comparatively small, when we realize that this amounts to 25 or 30 per cent income on the capital actually invested, we begin to see the source of revenue.

In addition to the charges above noted, the firm sometimes sets aside sums as drawing accounts for members of the concern, and also to pay interest charges, or to meet depreciation. Bad debts

and hard times affect the business of the concerns severely. Many of them run departments at an actual loss, or even conduct the entire business on a slender basis throughout the year with the expectation of the busy times in the fall and winter. The present troubles in the financial world have unquestionably affected the stores a great deal, but the above outline of their financial operations probably remains true.

2. ORGANIZATION AND WORKING CONDITIONS

BY ALBERT H. N. BARON

The retail establishment is the final stage in the long process of production. With the growth of population and the multiplication of needs, the distribution of commodities takes on ever greater importance in the social economy. This is evidenced by the enormous increase in the size of individual establishments and in the number of employees. It has led to increasing co-ordination and more intimate relations on the one hand between the retail distributor and the manufacturer; and on the other hand between the retailer and the consuming public. This has served to a great extent to standardize goods, and to simplify the whole selling business. But the modern storekeeper is not merely an intermediary between maker and user. The retailer has taken on additional activities. He frequently controls directly the processes of manufacture in important lines, as well as influences them through forecasts of local conditions and probable demands; while the ever-growing association of retail distribution with the various agencies of publicity links the stores more closely with the public. It has become a commonplace that the modern newspaper, for instance, could not have attained its present development without the support derived from mercantile — predominantly retail — advertising; and through the publicity at their command, dealers may and do exert an incalculable influence on the national economy, and public taste.

The methods of retail distribution are so numerous as almost to defy grouping or classification. Some of the principal ones may be mentioned. (a) Large, centrally located department stores, often with many millions of dollars in goods and thousands of employees — in reality, many stores under one roof; (b) somewhat similar neighborhood stores, general stores, etc., also dealing with large varieties of merchandise, but on a comparatively small scale; (c) the great and growing class of 5 and 10 cent and similar stores restricted to low-priced goods in enormous variety; (d) the specialty stores, dealing in relatively few lines of one general character, such as wearing apparel, household furnishings,

foodstuffs, etc.; (e) the mail order houses, which fill orders from customers at a distance and conduct their business with a minimum of direct personal relations. One need scarcely mention the other numerous but for the most part relatively petty distributing agencies,—such as peddlers of various kinds who meet us at every turn, and the scarcely less ubiquitous petty stores—which distribute, however, in the aggregate, a considerable portion of the nation's production.

The present account concerns itself chiefly with employment and conditions in the first three groups mentioned. No consideration of mercantile establishments could leave out department stores, which wherever they exist, give "tone" and "character" to the mercantile activities of the locality. Neighborhood stores—including the important stores of lesser localities as well as the local stores outside of the main business centers of large cities—have been considered and are of interest as illustrative of the variety of conditions obtaining in different places as well as within single important geographical units. For similar reasons, the 5 and 10 cent stores have a special interest. Developing with marvelous rapidity in recent years, they have been much in the public eye, and illustrate the principle of central control of small units scattered over a wide area.

In the succeeding discussion, it should be borne in mind that the statements made are necessarily generalized, and no one community or establishment is being considered, except as it may be given in illustration. An attempt is here made to visualize the main characteristics of an important phase of social activity, and in particular to present some aspects of the problem of wages in an impersonal way. What follows is to a large extent a summary of what remains prominently in the writer's mind after many visits to stores, as well as frank discussion with, and questioning of, persons engaged in various capacities.

NEIGHBORHOOD STORES

Outside of the central business district of every large community there are found establishments of various kinds and sizes, but all relatively small, each catering to the requirements of its locality. In cities of varied population and localized industries the distinction between the main business center and the smaller

district centers is especially marked. Size alone does not differentiate the stores. We find, for example, neighborhood stores in various parts of New York City that would be considered large department stores in a second class city. The following are some of the features especially marking out neighborhood stores in cities: Their custom is limited to a relatively small nearby area; the employees generally live within walking distance; the management is direct and personal, and usually in the hands of the owners; and the stores, in order to accommodate the residents, open much earlier in the morning than central stores, and frequently keep open one or more evenings in addition to the regular Saturday night business. Work among employees is relatively unspecialized. The standard of salesmanship and of other service is relatively low. The employees are usually of the less skilled grades, and wages are considerably below the standards of "downtown" stores.

That neighborhood stores are to any serious extent competitors of centrally located establishments is hard to determine. In the aggregate, of course, because of their numbers, the volume of the business which the small stores transact is quite large, and doubtless some of the business they do because of their convenience to the homes of people, especially in workingmen's districts, would in their absence go downtown. However, as for real competition, the small stores are at a decided disadvantage. They have no facilities for large outlet to enable them to purchase advantageously, and must, of necessity, for the most part carry staple merchandise, on which profits are relatively small; while even as regards local trade, since they are immediately dependent on a limited district, they are exposed to the vicissitudes of their town or part of the city.

FIVE AND TEN CENT STORES

This form of retail business, a direct outgrowth of the "Bargain Counter" of earlier days, has in a relatively short time extended over a huge field, and has become an important factor in the merchandising of almost every community. To the interested onlooker, it is a matter of constantly increasing wonder that such a variety of articles, for the most part goods of solid worth, can be obtained for a nickel or a dime. The fact that, in addition to

the numerous independent stores, the different chain stores, with branches varying in number from five to several hundred, are spreading more and more over the country, indicates the almost limitless extent of the wants they satisfy. It is the one form of retailing apparently adapted without modification to large centers of population and to small towns. In many of the smaller localities, the 5 and 10-cent stores are the most prominent and attractive as well as obviously the busiest places.

One outstanding characteristic of these stores is their relatively small size. Even in New York City, a good-sized store has only from 25 to 50 employees, while one having as many as 100 is quite exceptional. The entire organization can thus be directly under the eye of the manager.

Although a great degree of autonomy is left to the district managers and the managers of individual stores, the chain-stores are subject as regards general policy to a central office. Thus, one corporation operating stores all over the country, in order to obviate violations of the widely differing provisions regarding child labor, has prohibited all employment of children under 16, and has told its managers that if they get into any legal difficulty they shall be personally responsible.

In general, the stores comply in each case with the prevailing local practice in regard to hours and other conditions of work. The compensation of managers is, as a rule, based on the net earnings of their stores. It is therefore to the immediate advantage of each store executive to reduce the expenses, both of wages and other charges, as far as possible, in order to show the largest profit. Within very wide limits, each manager makes his own policy. As a result, we find variations from store to store in the proportion of employees to the amount of business transacted, and in the wages paid — often in the same community and under practically the same conditions.

The great success of 5 and 10-cent and similar low-priced stores has been due in large measure to a few related causes — such as putting all dealings on a strictly cash basis; reducing selling costs by abolishing delivery charges; carrying stocks of staples and seasonable novelties in wide variety; proper display of goods; and the facilitating of sales by having the same person act as saleswoman, cashier and usually also as wrapper. There is

little loss in "dead merchandise," because the bulk of stock is staple, and quickly disposed of. The cost of expensive advertisement, so essential to modern competitive business, especially to stores in large cities, has been almost completely eliminated. Instead of spending large sums for newspaper publicity, the popular-priced store secures a good location and utilizes its windows as trade magnets. Goods are selected and displayed so as to "sell themselves." The employees behind the counter are in theory expected to be little more than automatic attendants, to arrange merchandise, receive money and hand over the articles to customers. As one manager phrased it, "The cash register is our best employee."

In practice, however, much more is required, both in the way of work and of salesmanship than is stated by employers or appears on casual observation. The testimony of one of the mercantile inspectors is of interest in this connection. For a long time she had held a prejudice against the 5 and 10-cent stores as work places for young people and had discouraged children from going to work there. On further acquaintance her view came to be that in the present lack of agencies for training youngsters in mercantile employments, these stores, with the right management, are the most available training schools. Ability to arrange and keep stock properly is an important part of the equipment of every good salesman. In 5 and 10-cent stores, the departments are frequently shifted in location, and employees are changed from one counter to another. New departments, seasonable goods and novelties are being constantly added. Employees therefore would have to be dull indeed were they to work for any length of time in a store without acquiring considerable knowledge of goods, and methods of displaying and selling them. The potential experience in salesmanship is much greater than at first appears. Employees must be able not only to attend to customers promptly and accurately, but because of the large crowds, must have a knowledge of people and exercise patience equal to that required in any other busy place. It is by no means to be taken that the importance of transactions, to the customer at least, is to be gauged by the amount of money involved. A sale of a dime may require as much tact, patience and skill as that of ten dollars in other kinds of stores.

The successful manager of one large 5 and 10-cent store up-state stated that in his experience the policy of determining individual efficiency exclusively or even largely on a selling basis was impossible in this business, because of the great inherent unevenness in sales of different departments. He is convinced that, once chosen with care, there is little difference in efficiency possible among fairly intelligent and conscientious employees. He prefers to employ only girls who live at home and have had no previous store experience. To such he pays, as a minimum, \$6 per week, and has had little difficulty in obtaining help. But he has considerable difficulty in retaining his employees, who, after a few months' experience, are able to obtain better paying positions elsewhere. Hence, about 25 per cent are retained by him at \$7 and \$8, not necessarily because they are the best, but because of the absolute need of having in the store a nucleus of persons who know the various departments thoroughly and who can be relied on.

THE URBAN DEPARTMENT STORE

MANAGEMENT

As in the case of other activities that have passed beyond the stage of direct co-operation by a few persons, one of the most significant and interesting features of the modern department store is its organization. The distribution of goods required for supplying the wants of modern communities is so complex, that its various functions have become specialized, and its organization requires and taxes the ability of the strongest and most alert minds. Whether the actual direction remains with the ownership or is exercised through a hired manager, the test and watchword of successful store operation is sustained selling efficiency. In a sense, stores are semi-public institutions, and this character has been emphasized on many occasions by merchants themselves; but however much men may have this understanding of their function in mind, in conducting their business they are interested in one main private object—to show at the end of each week and each year increases in business and in net profits. Department stores have flourished in recent years like the proverbial green bay tree, and many have been strikingly successful; but some mer-

chants insist that past gains and successes are no infallible indication of the future. Every department store is not only in direct competition with other department stores, but with the many specialty stores that its departments parallel. The fact that both forms of business, in their many varieties, have remained side by side and have continued to prosper, indicates that not all the advantages of size and concentration can overcome the advantages of specialization. Specialty stores can, and on the whole do, give closer attention to the needs of individual customers, and at any rate appear to maintain a more direct and personal administration of the business.

In the urban department store, as a result not only of the size of the establishments and the great numbers of persons employed, but even more because of the huge number and variety of the transactions involved, a minute gradation of authority and responsibility is requisite. The scope for individual initiative is necessarily reduced. The arrangement of superiors and subordinates must be as precise as that of a military organization. It is in theory, and to a considerable extent in practice, just as impersonal.

The departmentalizing and subdividing a retail business has nowhere gone as far as in New York City. As a corollary, the impression made on the observer is that up-state stores, even those of considerable size, are much more of a unit than the large ones in the metropolis. For one thing, the principal owners of the businesses in smaller cities are very active in their management. In many cases it is apparent that a sort of personal regime obtains, and that the general sentiment within the business is one of cordiality. With few exceptions the heads of up-state stores seem to be easily approachable by their employees. Mere difference in size of establishments cannot altogether account for this. There are many small businesses in which the relation of employer and employees is one of aloofness; while, on the other hand, in a number of conspicuous examples of large establishments, even in New York City, the spirit of the head of the undertaking appears to percolate through all its gradations and ramifications.

There is, as a matter of fact, little to differentiate any particular employment in a department store from similar occupations in

that the department store is a complex of what are otherwise other lines of industry. This becomes evident when we consider known as independent businesses. It is in the size, collocation and co-operation of the different activities that we find new conditions arising. Thus, for example, transfers of employees from department to department are incomparably easier than between entirely separate organizations. Similarly, the establishment of a uniform policy toward employees, or toward the public, becomes of greater importance with the extension of the field it has in which to work.

CONDITIONS OF EMPLOYMENT

A heterogeneous institution, such as the department store has become, performing many functions and using the services of persons of diverse kinds and abilities, is naturally a focus of attraction for all sorts of people. As a rule, the employment office of a large store receives applications for almost every kind of a job, and the management has but to choose from groups of candidates. In every large community there are great differences in the actual services rendered by stores. But the mechanics of the work in similar departments of any two stores is largely the same. Thus, persons experienced with the stock of one store may change to another with little loss of efficiency—sometimes, indeed, with much gain. The bulk of merchandise is standardized; though articles of one manufacture appear under a variety of labels, and it is to the advantage of each store to build up custom for its particular brand. This helps to explain why most stores in large centers find relatively little difficulty in filling ordinary positions on short notice, by attracting people from other stores or from among the numbers who are, at any given time, out of a job.

The employees themselves form a large and constantly active recruiting force for new help. Knowing conditions in the establishment, and having advance knowledge of vacancies, they are instrumental in obtaining positions for friends and relatives. Some managers have stated specifically that they encourage this practice, having found that persons recommended by present employees are usually very serviceable. Advertising in newspapers, when in need of particular kinds of employees, especially dur-

ing rush periods, is a growing custom and is resorted to by all stores. A general disinclination, however, in New York City, as elsewhere, seems to exist to the utilization of the ordinary commercial employment office.

As a rule, the various divisions of a large store, especially the selling departments, numerous though they are, enjoy a good deal of autonomy. They have their own policies, are charged with their share of expenses and credited with their profits. The head of a sales department is generally the buyer, who not only purchases the merchandise for it, as his name indicates, but also administers it. The buyer is responsible to the management for the conduct and efficiency of the people under him. There is, naturally, keen competition among department heads to show the most favorable results in increased volume of business, reduced expenses, and greater net profits. In many instances buyers actually engage their subordinates. This is reflected in the personnel of departments. One head may show a preference for native Americans; another for those of a particular nationality; a third may discriminate in favor of those of his denomination, or in favor of men as against women, and so on. Retention, promotion and dismissal depend on the buyer's judgment, though in the best organized stores no one is discharged without a personal word with the superintendent.

The employment department in large stores is usually centralized in the superintendent's office, where all who seek employment, except executive and other high salaried positions, must go through a prescribed routine. Personal observation, as well as comparison of application forms, discloses great differences in the kind and variety of information desired as a prerequisite to employment. All agree in asking the usual questions relating to age, experience, etc., but some employers also delve rather deeply into the personal and social relations of the applicant.*

* The following are some questions from application forms. The italic items are the following occurring on the simpler forms; the others are not all found on any one form, but are collated from a number of sample application blanks obtained by the Commission:

Name in full.....
Address

In many cases, especially during rush periods, employees are engaged conditionally, prior to the investigation of references. This practice may help to account in part for the immense number of changes that occur in some of the stores. Unsatisfactory

How long have you lived at your present address?.....
 Name two of the previous places where you boarded or kept house, with
 length of time in each place.....
Age..... *Married or single*.....
 Place of birth..... *Nationality*.....
 Languages spoken
 Have you had a common school education?.....
 Have you graduated?.....
 Are you in good health?.....
 Have you ever had any serious illness?.....
 Height feet inches.
 Weight pounds.
 Have you good eyesight?.....
 Are you a good judge of colors?.....
 What church do you attend?.....
 Do you live with your parents?.....
 How many members of your family reside with you?.....
 Have you anyone dependent on you for support?.....
 Are you the sole support?.....
 How much do others contribute?.....
 If housekeeping, what rent do you pay?.....
 How much board do you pay?.....
 Cost of living exclusive of clothing?.....
 Do you know any of our employees?.....
 If so, give names.....
 Have you any relatives in our employ at present?.....
 Are you employed at present?.....
 Where?
 In what position?.....
 At what salary?.....
What position do you apply for?.....
Salary wanted?
Departments most familiar with?.....
 Have you ever been employed here?.....
 If so, how long?.....
 In what departments?.....
 When did you leave? Month Year
 Why did you leave?.....
Last employer's name.....
 Address
 Kind of business.....
What salary did you receive?.....
How long were you there?.....

references result in the dismissal of the employees after a few days.*

Up-to-date stores keep in convenient form for reference all information on hand relating to past and present employees, as well as the persons who have at any time applied for work. Such records are also found helpful in determining efficiency, and do away with dependence on memory and the chance impressions of officials.

When did you leave?.....
Why did you leave?.....
Were you ever dismissed?..... If so, give reason.....
Names and addresses of people (not relatives or previous employers) who know you to be honest and worthy.....
In case you are called to assist in another department, will you respond willingly and put forth your best efforts to please?.....
Would you consider it your duty to report in writing or otherwise, any act or conduct of your fellow-employees that you consider against the interest of our business?.....
I agree, if engaged, to conform to the rules and regulations of the firm. My engagement can be terminated at any time without notice (at the close of any business day) at the option of the firm, without assigning any reason therefor, I being likewise at liberty to terminate.
Absence from duty for one week without notice terminates my engagement. Should the position assigned to me require the wearing of a uniform, I agree to pay for same at the rate per week required by the firm, and the said uniform is to remain the property of the firm until fully paid for by me.
In the event of my being engaged, I agree to become a member of the Employees' Association and to abide by the constitution of the same.
The firm is authorized to deduct the amount of the dues from my salary.

*As a rule, no reason is assigned for dismissal. Some application forms specify that no reason for leaving or discharge need be given. In most instances the first and only information received by an employee regarding the termination of his job is a slip in the pay envelope bearing the laconic message, "Your services are no longer required." The practice, however, varies greatly. One manager stated that he had made it a rule not to discharge any regular employee, especially one who had been with the firm for a long time, even if obliged to let him go because of delinquency or other good reason. The employee was in every case given an opportunity to "resign." Unless the circumstances were serious, the firm did not then feel obliged to "expose" the former employee in case of reference by other firms. In another large store although dismissal is within the jurisdiction of the employing superintendent, every employee who resigns is interviewed by the general manager before leaving.

Thus, a valuable asset of one of the large New York City stores is the "dead file," containing information accumulated in almost 20 years regarding more than 150,000 persons who have been in the employ of the firm during this period.

In one up-state store the superintendent keeps, together with the record of the sales of each clerk, a personal record containing the application blank, the references filed at time of application, and a list of demerits. The demerits run something like this —

January 3. Late 10 minutes.

February 1. Customer complained of discourtesy.

March 29. Buyer had to reprimand for disorderly counter.

March 30. Gave wrong address.

Then, when a clerk asks for a raise, her selling record and her personal record are both looked up and her promotion depends upon what these records disclose. Clerks are told frankly why they are not raised if it is thought best not to promote. When a clerk leaves the store, her sales record and personal record are filed away together and then if she ever comes back for another position, her record is looked up and the firm can tell of her efficiency and standing when she was with them before.

In all but the largest up-state stores, in which one person usually employs for all departments, no systematic records of employees are kept. It has even been found in stores of considerable size that the management did not have a complete list of current employees, and in rare instances not even a complete current payroll was in existence.

FLUCTUATION OF EMPLOYEES

In connection with employment in manufactures it has been abundantly shown that although the wages paid bear no constant ratio to the length of time employees have been consecutively with one establishment, the shifting of employees from factory to factory has an important effect, adversely, on the wages paid. The situation as regards store employment is similar. The changing of employees, of serious moment everywhere, becomes of very great importance in larger centers. That the degree of shifting of personnel increases on the whole with the size of the

locality, because of the presence of many alternative employments, holds true not only of unskilled employees in the stores, but also of salespeople and other similar groups. The important difference in character and significance of this shifting from place to place, from the standpoints of the factory and the store, becomes clear if we bear in mind the consideration that, while in the factory, as a rule, the worker has but a particular piece of machinery to attend or an operation to perform, and is in great measure a mere cog in a great impersonal machine, most of the employees of a store have direct and often complex relations with others there as well as with the public. To obtain merely a working knowledge of the routine and the policy of a store requires some time,—several months, if a knowledge of the stock be added. The shifters manifestly cannot do this. Before they learn the location of departments—before they find out the location of stairs and exits, they have moved away.

The large amount of short-time employment in some stores is in same ways an almost inexplicable phenomenon. Changes are not always for the better from the standpoint of wages. Many of the voluntary as well as involuntary “resignations” are due to incompatibility or other personal reasons, in which the question of wages does not play the deciding part. Others must change because of business reverses of their employers. Changes do not appear to be due predominantly to alternation of busy and slack seasons, or to be coincident with them. Nor does the number of fluctuations always coincide with the variation in total numbers employed. Of course, at certain seasons, particularly during the Christmas holidays, when the demand for additional and temporary labor is hard to fill, even with the impressment of the unemployed, changes from one firm to another are at their height. Some stores have come to depend much on their lists of extras, comprising married ex-employees and others who can be called upon for emergency service. One New York City firm has several hundred who regularly return for work during the Christmas season. During the holidays, furthermore, large numbers of inexperienced persons are necessarily taken on, and some of these remain after the rush days are over, often displacing those of more experience but less efficiency.

Generally speaking, the smaller the community the more are we likely to find employees remaining for long periods with one firm. The absence of alternative employment in other local industries, as well as the fact that little is to be gained by changing, tends to keep employees in one place. In larger cities, with their greater and more complex organizations, there is little personal attachment in the majority of cases. Store officials have sometimes expressed themselves in strong terms regarding the conduct of many employees who go over to other establishments, without notice, during the busiest periods. However, this action on the part of employees is not to be wondered at, since it is not usual for employers to give much notice when discharging or laying off help; and many of the applications for employment have the specific condition that either party may terminate the engagement without notice. The frequency with which this is practiced by employers when business becomes dull explains and mitigates the otherwise inconsiderate action on the part of employees.

Establishments that have been long in operation, particularly those that have been continuously under one management, frequently show a large proportion of employees who have been with the firm for many years. Some employers who disclaim the title "philanthropist" nevertheless admit that they feel a certain compassion for such faithful and long-serving workers. It is quite evident that in many instances old employees are retained to "potter about" at their wonted occupations when they are of no positive service. But the very lack of generality and system in this practice brings into sharp relief the absence of foresighted provision for old-age insurance or pensions.

There can be no question that there exists much more private beneficence to individual employees than is generally known. One up-state store, which makes no pretence of being philanthropic, stated that it had spent last year over \$5,000 in the form of pensions and special contributions to its employees. Small stores are relatively at a great disadvantage in this regard, as they cannot put aside even a modest sum for such purposes.

Aside from the advisability of keeping such personal benefactions private in order to avoid the charge of making them for advertising purposes, employers must often insist on secrecy in

order not to be burdened with numerous cases fully as "deserving" as the ones chosen for aid. Frequently it is a matter of helping a dependent of an employee in distress. As one merchant put it, it would be too much to expect that employers should make a practice paying the hospital, funeral and other expenses of dependents of employees.

QUALIFICATIONS OF EMPLOYEES

The qualifications desired or required of store employees vary not only with the kind of work they are expected to perform, but depend very much also on the "grade" and location of the establishment and the policy — the preferences or prejudices — of the management. Stores that are centrally located and appeal to patronage from a large area naturally require a sales personnel that is more adaptable than stores catering to a limited trade in one locality.

Physical Requirements

In but two of all the establishments studied have any provisions been made for a systematic and thorough examination of all persons before they are definitely taken on the force. Thus, so far as physical fitness of an applicant for a given task is concerned, according to the almost general practice, the determination is the result of the fleeting impression of the employing official in the course of an interview of a few moments. Occasionally the applicant is required to answer the question, "Are you in good health?", but it cannot be expected that anyone not in good health would jeopardize the chance of obtaining employment by saying so.

This of course is the existing condition in almost all lines of employment, and is not limited to stores. It is probable, however, that much of the strain and misery of many store occupations, especially those requiring much standing or bending, may be attributable to the fact that persons are engaged who are not physically fit for the work; and much of the human cost in employments might be lessened by preliminary examination, and periodical examination thereafter.

The relative severity of different classes of occupations within a store organization is a matter difficult of determination. Even in one group, such as sales, one department, *e. g.*, rugs or domes-

tics, may require almost constant lifting of heavy articles, while another, say gloves or jewelry, is relatively effortless. Again, some departments may be very busy, permitting employees no time for rest, at the same time that others are dull. To what extent, the constant adjustments, necessary as different customers are dealt with, become a factor increasing or lessening fatigue depends greatly on the temperament of the individual. There is no doubt that some prefer the counters where there is "something doing every minute," while others prefer the "slow" departments.

In the office work of stores the bulk of the work is of a strictly routine character. One gets the impression that office employees are kept rather busier than in most other branches doing comparable work.

The shipping and delivery force have obviously the heaviest work. Packers, *e. g.*, must not only be skilled, especially as so much of the goods handled is of an easily breakable character, but their work also demands sustained exertion. Only rarely is any of this work done by women. In connection with the delivery proper, a noteworthy feature is that both drivers and chauffeurs often must take care of their vehicles, and drivers also of their horses, after regular hours.

Personal Appearance

Salespeople constitute the part of the store personnel with which the public comes most in contact. To nearly everyone the expressions "high grade" as contrasted with "popular" or "low grade" store have reference fully as much to the personnel as to the quality of the merchandise sold or the characteristics of the building and fixtures. It is a far cry from the rough, careless aspect of some stores to the refined, well-groomed appearance of the employees in stores that cater to "the best trade." There is no question that the good-looking, well-dressed person is favored in getting and keeping employment. This is particularly applicable as regard women. Most stores have definite requirements for the dress of their employees aside from those who are uniformed. Thus, a common requirement is that saleswomen should wear white shirt-waists and dark skirts.

The distinct preference for persons of good appearance is frequently reflected in the wording of advertisements for help. Some

employers have regretted that conditions should exist making for such discriminations, since good looks are not necessarily accompanied by ability, honesty, industry or "general worth," upon which a store's lasting success is based. Managers have again and again pointed out, with evident pride, employees who were physically defective — often to a degree that one might expect to repel patrons — who were nevertheless the most efficient people in their departments. But such stray examples serve only to emphasize the stress ordinarily laid by employers on appearance.

Manners

Tact and pleasing manners are highly requisite to salesmanship, not less in "popular" stores than in those catering to "fine trade." Well-nigh limitless patience is as great and as necessary an asset as knowledge of merchandise. Indeed, the latter is something that must be learned by everyone, but temperament appears to be fixed by the time people go to work. In the high grade stores there is also required a certain dignified obsequiousness, and at least a simulation of acquaintance with the mysteries of fashions and proprieties. These are unquestionably rarer in this country than abroad, and there is general complaint on the part of the higher grade stores that it is difficult to obtain the right sort of persons unless they are taken at an early age and trained into the particular organization. But these stores do not pay conspicuously higher wages to beginners, though their standards are higher. Those experienced elsewhere who are attracted by the higher wages paid by such stores to full-fledged employees are not usually of a type that high grade stores prefer.

Educational Qualifications

While employers agree in looking with increasing favor on high school graduates, they appear to have no specific reason, in most cases, for their preference, which may be merely a reflection of the common view that an increment of schooling should provide a better sort of worker. It would be fair to say that, in general, the educational standard for store employees is low, and schooling is even now decidedly a minor factor in determining an employer's choice. Very rarely is any question regarding education asked on

the application blank. Ability to write legibly and to perform simple arithmetical operations with exactness and a fair degree of speed appear to be all the literary accomplishments that are absolutely necessary. But such a degree of expertness should have been attained long before passing through the grammar school. Managers repeatedly complain of the poor quality of the product that the schools turn out, as evidenced, for instance, by the large number who cannot fill out an application blank legibly and correctly. In New York City and elsewhere applicants are so sorely deficient in the presumably well-taught "Three R's", that the stores have established, in conjunction with the Board of Education, classes to supplement the regular school work. It is only reasonable to expect that the generally low standard of educational fitness prevailing is in itself an obstacle to increase in efficiency and eligibility for promotion to responsible positions.*

Openings for persons without experience are available in every store. With rare exceptions, however, stores prefer to give employment, even in non-skilled occupations, to those already experienced. Some stores, however, seem to serve, consciously or not, as training schools, though generally having no organized educational courses. The larger establishments have necessarily undertaken directly the training of young persons for different classes of work, in order to supplement the insufficient supply of experienced help. Of these courses, the one most developed and significant is that for salesmanship. The instruction usually consists of a few hours per week in taking care of stock, obtaining a working knowledge of the merchandise in a department, and methods of dealing with different types of customers.

In Buffalo the coöperation of stores with the city school system has resulted in a school of salesmanship, to which the principal stores send selected employees for training. The policy of the school is largely determined by an advisory committee of store superintendents, who also give informal talks before the students at frequent intervals. The school seems to be highly regarded by the merchants as well as by the educators of the city.

* There are, it is true, some illiterate salespeople who are successful despite the fact that they may be unable to make out their own sales checks. But it is only fair to note that these are usually elderly employees, and they belong to a passing phase.

In the smaller communities, where changes are relatively few and the rate of growth is slow, even the large stores have at any particular time only a very small number of novices. The employers appear to go on the belief that even without formal training these beginners should under the circumstances learn the work more easily than elsewhere with formal instruction, since they are from the outset brought into contact with more various aspects of the business than is possible in metropolitan stores.

Age Limits

There are many selling positions, chiefly at bargain counters, notions, and other low-priced goods, for which the need of experience is least, in which children of school age were frequently employed in the past. Nowadays, quite generally no children under 16 are employed in selling, their use, where still employed, being as check boys and girls and at the wrapping desks. But the restrictions of the Labor Law and the installation of automatic devices are discouraging the employment of children altogether. From 16 then as a practical minimum for both boys and girls, the preferred age period extends to 30 years, but varies considerably from store to store and from department to department. In many department stores, despite the presumed advantage of their large accumulated experience, there is doubtless a tendency toward the elimination of older help. It is difficult to say where, except for personal and humanitarian motives, this process would stop. There is no "dead line at 40", but unquestionably people above this limit, even though of acknowledged efficiency where they have been, are finding it ever harder to obtain new employment.

Moral Qualifications

Because the general subject of the morals of store employees has received considerable attention in discussions in the public press and otherwise, it has become a topic on which few persons connected with store management have been found to speak with composure. All who have been interviewed profess their determination and desire, if only from motives of enlightened selfishness, to employ only persons of upright life and proper habits. It is recognized as self-evident that a store's lasting success depends upon the character of its employees. At the same time,

many store executives disclaim all power or desire to censor the behavior of their employees outside of their working hours, provided their work and deportment in the store is acceptable. Some managers, however, have expressed themselves in favor of more rigorous censorship of the conduct of employees, both in and out of the store. All admit that it is a most difficult part of their position.

It is assumed, and experience has justified the assumption, that the vast majority of people are honest and may be trusted. The managers interviewed appear to think that the majority of their employees are, if anything, rather more trustworthy than the general body of people. Yet stores of any size find it advisable to take extensive precautions against dishonesty not only by various checks and audits, but more directly through a detective service that occasionally becomes little else than a spy system. Not only are "outsiders" employed, in the guise of shoppers, etc., to test and report,* but employees are encouraged to report on the delinquencies of colleagues.† The obligation to do this is in many cases very clearly, though not in terms, made a condition of employment. Most application forms, to be filled and signed by candidates for position, contain this query: "Would you consider it your duty to report, in writing or otherwise, any act or conduct of your fellow-employees that you consider against the interest of our business?" This has probably served, for one thing, to discourage united action on the part of employees.

Within the store itself many conditions exist encouraging or discouraging honesty. One of the most flagrant stimulants for chicane and sharp dealing has been abolished through the introduc-

* Thus, in one instance reported, a customer complained to an employee in a large store of her inability to get the kind of goods she wanted in a neighboring department. The employee, in order to be obliging, gave the customer her card with the name and address of another firm, where she might find what she desired. The following morning the employee was called to the superintendent's office and confronted with her customer of the day before, who proved to be one of the store detectives. After a few words of denunciation of her lack of loyalty to the firm, the superintendent summarily dismissed the employee from the service.

† A typical instance is the case of a saleswoman in one of the largest stores whose regular wage was \$10 but who in addition received \$2 per week. When asked what this was for she replied, "It is for keeping my eyes open to what goes on in the department."

tion and spread of the one-price system. Much, however, still remains to be accomplished. The current movement, both within advertising circles and among the public looking toward the elimination of false and extravagant statements and claims should result in raising the level of the selling profession. Foresighted employers have long since realized that it is not reasonable to expect strict honesty on the part of subordinates when they themselves set a bad example in their relations with the public.

DIVISION OF LABOR

“Productive” and “non-productive” are the two terms under which employees are grouped in most department stores. The former generally includes that part of the personnel engaged directly in selling goods; the latter comprises all others. For the purposes of administration, as well as for the ascertaining and distribution of expenses and profits the organization is further partitioned into many — it may be a hundred or more — arbitrary “departments” or “sections.” But for the purpose of a functional analysis of the operation of a modern department store, a few large divisions suffice. One such classification may be made as follows:

Central or executive, having general oversight of the entire business; purchasing and maintenance of stock; selling; delivery; employment; office, for the firm’s records of transactions; advertising; manufacturing; service organization. Such a grouping does not correspond with an accountant’s distribution, nor with the “departments” as we know them in the stores. These divisions are not coördinate or mutually exclusive categories. Persons in any one class may function in one or more of the others. Advertising, for example, is intimately connected with both purchasing and selling; while the employment department covers all branches of the business. But the divisions named are sufficiently marked off from one another to be held distinct.

Under “office” is included a great variety of occupations, principally employing females. They range in skill and responsibility from the merest routine work of young girls to the highly skilled, generously paid, confidential services of heads of divisions. Special note can be taken here of only a few typical classes.

Cashiers are employed to take care of the receipts from sales. In many instances every floor or section of a store has its cashier's office. The work of carrying the money from salesperson to the cashier, and of the goods to the wrapping desk, and then bringing back change and the tied up goods, still furnishes the largest field of employment of boys and girls. But the method increasingly in vogue is the use of mechanical conveyors and pneumatic tubes, by means of which salespeople in all parts of the store send the money received from customers to central stations. Here sit the tube-girls — often numbering a score or more. Each attends several tubes, out of which the cylindrical money-boxes shoot at great speed. The girl opens the receptacles in turn, and, in the twinkling of an eye, makes change, stamps the sales check "Paid," and returns it to the point of origin. At the close of business, the sales checks are totaled and the money counted.

As "auditors" there are employed large numbers of girls who sort and compare sales slips, bills, etc., verify computations, and prepare material for brief statistical presentation of the business from time to time. There is always a large amount and variety of bookkeeping — such as ledger work, sales records, purchases, credits — in which both men and women are engaged. To take care of the filing of records many clerks are needed. Every store inevitably has an enormous mass of correspondence. This necessitates the employment of a host of secretaries, stenographers and typewriters. The mail order department requires an organization of its own, particularly "shoppers," who represent the customer in the selection of goods.

The task of keeping, with the help of time clocks and other devices, accurate records of working time for an establishment employing hundreds — or even thousands; the preparation of the weekly payrolls and pay envelopes; and the paying of employees require the continuous employment of a separate corps. The employment division, with its numerous functions, such as the ascertaining in advance the help needed for each branch of the establishment; interviewing and selecting applicants; investigating references and complaints; and general supervision and discipline of employees — all this requires a staff in addition to the superintendent and his immediate assistants. The advertising department is another separate organization, with a personnel varying

all the way from manager to office boy, and including such diverse persons as writers, artists, printers, sign writers, and window dressers. Messengers, telephone operators, post office employees, information desk attendants, are some of the other classes of employees found in varying numbers in what we have called the office division.

In the handling of merchandise, before it is sold, the principal operations are checking, marking, putting away in stock. After goods are sold, they are wrapped, packed, and delivered to customers. These are all vital parts of store operation. With the exception of wrapping, in which a large proportion of girls are employed, this is chiefly a group of men's occupations. Many of the employees are young and get their first experience with the receiving and delivery departments. The work is largely routine and unskilled, though it requires continuous physical exertion, and on the whole offers little chance for advancement. Alert stock people, it is true, on becoming familiar with merchandise, are naturally advanced to the sales division. The delivery department, especially in the large centers, is becoming increasingly important, more extended in scope and more efficient in operation. Beginners start as bundle boys, special delivery messengers or wagon boys assisting the drivers. With the increasing use of motor vehicles, the standards and requirements are being raised and more opportunity is offered to men of skill and energy.

Even in merely glancing over a list of sales departments, or in cursory observation in any large store, one notes the variety of what is included in the comprehensive and apparently clear term, "salesman" or "saleswoman." Even the diversity of goods partly indicated by the variety of sales departments of a representative store in New York City is no greater than the varieties of the human element involved. Here, for instance, are little girls in short dresses, "saleswomen" at notion counters; and farther on, is a woman of experience and tact, also a "saleswoman," who advises on color schemes for interior decorations or the styles and materials for costly gowns. On the same floor, within a few steps of each other, are the girl who sells cheap editions of the latest "ragtime," and the expert who knows all the "points" of pianos. Youths are called "salesmen" when they do little more than "wait on customers" at a table strewn with odd and ends of

men's furnishing goods; and we find as "salesmen" also gray beards who are authorities on oriental rugs or rare first editions. Between extremes such as these, there are all sorts of varieties and gradations of employees. One characteristic they have in common — their specific function in the store organization is to sell goods.

Perhaps the best way of indicating typical operations involved in various departments of a modern retail establishment is to follow an article through the store, noting the principal steps, from the time it is purchased until it is sold and delivered to a customer.

The buyer of the dress silks department, for example, places an order with a mill representative for a lot of black taffeta. The carbon copy of the order, specifying quality, quantity, price, date of delivery, terms, etc., is filed in its appropriate division in the office. Months later, an invoice is received from the mill for a shipment of the silk. It is compared with the order before it is approved and filed. A little while later the case of silk is delivered to the receiving platform of the store. The case is opened, the goods are unpacked, carefully examined and checked with the invoice. The pieces are then marked with the cost and selling prices and other data desired by the department manager. The invoice, checked and approved, is returned to the office for payment. The facts regarding the shipment are entered on the stock book, in which is kept a detailed inventory of all goods received and sent out of the stock department. Some pieces are sent at once to be placed on sale, and charged to the department; the rest is placed on the reserve stock shelves, to be kept until required to replenish stock sold. The work thus far involves the services of teamsters, receivers, checkers, markers, stock clerks, and other helpers.

In the silk department, the saleswoman puts the pieces of silk on the proper shelves or on display, as the case may be. It is her duty not only to sell goods, but also to keep the shelves and counters of her section clean and orderly, and arrange the goods so that they may be easily gotten at. Now comes a customer who asks to see some black taffeta. The saleswoman shows several pieces, explains the quality and other characteristics of the different kinds — the "points" of the goods — and prices. On

receiving an order, she measures and cuts off the quantities desired. She then computes the amount of the purchase and proceeds to make out the sales check. A form of salesbook commonly used contains perforated slips, with carbons between, so that they may be filled in triplicate at one writing. The saleswoman writes down the kind of goods, quantity, price, amount received, date, her own number and other reference marks. The goods, money and sales slip are then sent to the wrapping desk. Here an examiner compares the goods with the items on the sales slips, and sends the slips with the money to the cashier. The latter retains one slip, and sends the second to the auditing division. The third one she stamps "Paid" and returns to the wrapper for inclosure with the goods. The wrapped parcel is sent to the saleswoman, who hands it to the customer, thus completing the transaction. If the goods are to be delivered to the customer's residence, the saleswoman, in making out the sales slip, writes the name and address. The package in that case is sent directly from the wrapping desk to the shipping room. There, the "router" puts it together with others addressed to the same part of the city, and in due course it is delivered by wagon or otherwise.

In addition to its force engaged in sales and kindred activities, every store carries on some manufacturing. At the least, there are workrooms for the alteration of garments, repair of furniture, etc. In the case of the larger stores, there is a variety of manufacturing departments, comparable in size with large independent factories. One typical New York City store shows the following list of such activities:

- | | |
|-------------------|----------------------|
| 1. Art. | 13. Ice cream. |
| 2. Bakery. | 14. Jewelry. |
| 3. Bedding. | 15. Men's clothing. |
| 4. Candy. | 16. Millinery. |
| 5. Carpets. | 17. Optical. |
| 6. Cold storage. | 18. Paper flowers. |
| 7. Corsets. | 19. Photography. |
| 8. Custom shirts. | 20. Picture framing. |
| 9. Delicatessen. | 21. Pleating. |
| 10. Dressmaking. | 22. Shoe repairing. |
| 11. Engraving. | 23. Upholstery. |
| 12. Furs. | 24. Women's suits. |

Here is involved the employment of almost every grade and variety of labor, skilled and unskilled — from the little girl who pulls basting threads to the expert, high salaried millinery designer who thinks out stylish “creations;” from men who put together “knock down” furniture or open bales of mattress filling to skilled engravers and artistic photographers. In these departments, we find employees in some occupations — upholsterers, for example — who are organized and who work on a basis of hours and wages more favorable than the others.

Lastly, note should be taken of the service organization, comprising a very complex and multifarious group of activities. The mere upkeep of the physical establishment, especially because of the importance of a clean and orderly appearance in the estimation of the public, necessitates a large corps of janitors, porters, cleaners, of both sexes and for the most part unskilled; as well as engineers, electricians and other technicians. Much of their work is necessarily done during the hours when the store is closed to the public. Doorkeepers and watchmen are required for day and night duty. For the transportation of customers and employees from floor to floor, elevators and escalators, with their attendants, are provided.

In addition there are supplementary departments, not operated directly for profit but for the convenience of customers and of employees. Such are the cloakrooms, check rooms, accommodation desks, rest rooms and hospital, hairdressing and manicuring parlors, barber shop, and, largest in extent and use, restaurants, tea rooms and quick lunch counters. These departments employ in the aggregate large numbers of persons, principally women. To a greater extent than elsewhere in the store, part-time workers are utilized in these activities. These, too, are the departments in which employees are frequently expected in varying degrees to be dependent on gratuities for part of their income.

The general testimony of merchants, both in New York City and up-state, is that preference in employment is given to persons living at home. This is usual in the case of both male and female employees; but in the case of women it is often one of the requirements to be waived only for exceptional reasons. It has become such a well-known condition that very frequently women who live alone or board with strangers report to employers that they

live with relatives, in order to have a better chance of securing work.

Most of the executives with whom the subject was discussed stated that they prefer to engage women living at home because they are thus better assured of a steadier, more honest and reliable force. This is in general undoubtedly true. But some employers frankly admitted that only people who lived with their families could afford to take places at the wages currently paid. In some instances this is strikingly shown by the payment of different rates for the same work, the higher rate being given women living alone. Thus, one firm which has a minimum of \$6 for women living at home, pays at least \$7 to those who are self-dependent.

To some extent, semi-dependence on others for a time after entering employment may be taken as an accompaniment of apprenticeship, and this is the reason for low wages most frequently assigned by employers. This explanation would be more impressive, however, were the period for learning definitely established, and were it recognized that persons passing through this period without having acquired requisite proficiency should be considered subnormal and classed accordingly.* There is first of all, a conspicuous absence of any serious attempt to really classify employees according to ability. As a matter of fact, merchants do not deny the inadequacy of these wages to cover even the bare necessities of decent existence; but they seek to show that employees are not "worth" more in a business sense. One is met even with the assertion that regardless of how small their wage is, large numbers of employees are so inefficient that they are not worth what they are being paid. It is not to be taken seriously that any considerable number of low paid employees are actually not worth what they are paid; nor, as is also asserted, that they are a positive loss to the firm. But it does seem to be true that the very fact that people may be obtained cheaply leads to employment of some — in the aggregate, of very many — who are not really needed. True, this is largely a matter of opinion. But the impression cannot be effaced, after many visits to stores and talks with executives and employees of all grades, that, while there are sometimes too few employees for the work to be done,

* Compare the tables and discussion of experience and wages in the section preceding.

the truth often is that there are too many, assuming that economy of personnel is the true criterion of efficient organization. This appears to be especially the condition in many of the popular trade stores, which usually deal with large crowds, and whose success, to a considerable degree, depends upon the celerity with which sales may be made during short congested intervals, principally in the afternoon.* It is, however, to some extent also true of higher-grade stores which have no such flood-periods of trade, but nevertheless have an over-supply of help in order to give their slow-purchasing customers plenty of time, and yet avoid keeping patrons long waiting.

It would seem, also, that the very argument that a minimum wage even slightly in excess of existing minima would mean displacement of large numbers of persons, presumably without affecting adversely either the operation or the profits of business, is a clear indication that numbers of people are employed principally because they can be gotten cheaply enough. This is the class that is "on the margin," industrially; and it is the very class whose earnings, small as they are, are made still more precarious by the fluctuation to which all business is exposed.

The mere facts concerning wages paid do not, of course, tell the whole story. It is true, as has been noted, that there is scarcely a store of considerable size that does not carry on its payroll outright pensioners who do not report for work at all, or else are still found at their old places, even though their presence is actually a hindrance. Occasionally, as expressive of their opinion of what a minimum wage might do, merchants have said that it might compel employers to curtail these and other semi-charitable expenditures. One astute and successful man objected that, in addition to weeding out the more inefficient, the estab-

* Store managements of course realize these facts, and have made attempts to distribute business more evenly during the day. In addition to ceaseless exhortations of the general tenor of "Come early and avoid the rush," various inducements are offered for shopping early in the day. Thus, sales are generally scheduled for the morning hours and some stores give double the usual quantity of trading stamps for purchases made before noon. Still, to a large extent, the concentration of most retail business in a few hours of the afternoon seems to be an unchangeable condition. It results from the fact that women with households, who constitute the main body of buyers, prefer to do their purchasing after they have put their homes in order.

lishment of a minimum wage would make more urgent the need for further measures of social insurance such as an old age pension system and other radical innovations for which, he stated, the time does not seem as yet ripe here.

WAGES

That wages, "other things being equal," cannot be permanently higher or lower in mercantile employments than in alternative occupations would seem to be one of the economic dicta that cannot be gainsaid. Yet many stores, even as regards their non-selling departments, seem to exert such an attraction for young people that it is almost literally true that, in many localities, wages depend altogether on what the employer wishes to pay. Applicants appear to be willing to start at any rate. Furthermore, we have found stores in the same community and under practically the same circumstances whose rates varied from 25 per cent to $33\frac{1}{3}$ per cent.

The compensation of store employees can best be considered under two general heads — the selling and non-selling employees. In the case of a large part of the personnel it is frequently found that additions and deductions must be taken into account, as well as the amounts that are directly designated as wages.

Non-selling Employees

Of the non-selling personnel by far the greater part are engaged in occupations in no way characteristic of stores. The wages paid them therefore may be compared directly with those in other industries. Of those occupations more or less limited to stores, it is fair to say that they require little skill or training and for the most part offer little opportunity for advancement.

The non-selling force, with inconsiderable exceptions, is everywhere paid on a straight time basis. For the most part it seems to be recognized that the work of this great and varied part of each organization is necessarily dependent on the activity and success of the sales departments; and that aside from adequately organizing the operation of these different activities, little can be done in the way of stimulating efficiency except by attending to individual cases. It is therefore found that quite generally no such

serious attempt has been made to gauge relative efficiency or "productivity" in the case of "dead help" as we find in the case of sales. The wages at which non-selling employees are rated constitute almost exclusively the maximum amount of income. Exceptions are those unimportant additions that are allowed during special sales at the Christmas holidays, etc., which, however, rarely have any direct relation to the amount of work done by an individual or to the amount of his regular wages.* They are scarcely worth while taking into consideration as affecting wages. Thus, 10 per cent of two week's wages means an addition of less than .4 of 1 per cent per year.

It has been difficult to ascertain in stores the exact basis upon which different classes of employees are paid. In so far as there are standard or prevailing rates in similar occupations outside of stores, of course they influence the wages in stores. This is evident in the case of mechanics and others, especially those who have a trade organization. But the large variations within a store for work of the same kind — work that in itself is difficult of exact appraisal — makes one question the accuracy of the judgment of those who set the different rates. Thus, it seems to be accepted as almost axiomatic that persons selling in cheap departments should get the least pay. But while it is true that young persons and others of small experience are usually placed in such departments, it does not follow that their services do not require as much effort, or are not worth as much as those of more fortunately placed co-workers. Selling \$10 of notions may be a far greater task than selling ten times as much in a suit and cloak department. To a considerable extent selling efficiency is not shown by actual sales, nor is it always dependent on the individual. A store may not prosper for many reasons, and yet the failure of departments may not be due to lack of ability or effort of the salespeople. Or, as happens frequently even in prosperous stores, some department may not be paying and employees may virtually have

* One store, for example, which regularly has two great semi-annual sales, each lasting one week, during which the sales people are paid 1% additional on all sales, pays the non-selling employees a flat addition of \$1 per week during these periods. Another firm allows all employees during special sale periods an addition of 10% of their regular rates. Even if this extended over as much as four weeks or a month per year the increase would be less than 1% of the annual earnings.

to idle their time away. Indeed, one may question whether some of the departments in flourishing stores, that take up valuable space for an unimportant volume of business, and whose expenses might rightly be chargeable to advertising, are not largely maintained through the low wages of employees. Stores that have definitely established minima can of course easily determine whether a person is "worth" as much as the minimum,—that is, whether he is worth employing at all or not. But above that, the basis for judgment of relative worth seems to be scarcely discoverable. Few persons apply for work who, if usable at all, may not be placed in any one of several positions; yet the wages that a person receives would in that case be almost accidental, according as he is assigned to one or another of these positions.*

Selling Employees

By far the greater part of the salespeople can count upon their weekly wages as the total of their income from their store employment. The consideration of the wages of salespeople as a whole is, however, complicated by the fact that there is a large variety of additions which cannot be omitted, and which is frequently referred to in discussions by both merchants and employees.

* The lack of systematic determination of ability necessary for given positions, or of payment commensurate with the requirements, is often strikingly illustrated in store practice. Everyone who has looked into the matter realizes that the work of cashiers, especially "tube" operators in a busy store, is highly responsible as well as very trying. It is work requiring a high degree of steadiness, quickness and accuracy of brain and hand. It is reasonable to assume that the relative importance of a cashier's position might be judged by the sums handled, and that the more important the transactions the more carefully will an employer choose the cashier. But as a matter of fact, cashiers are paid flat weekly rates, and nowhere have we found their pay varying in proportion to the number of transactions or the amount of money handled.

Again, it is a matter of common observation that the strain—both physical and mental—increases as we go from the higher to the low-priced departments—from the parts of the store where sales are few and slow to those parts where transactions are rapid and very numerous. In notion departments, for example, the cashiers, as well as the saleswomen, handle in a busy day hundreds of individual sales, although altogether perhaps not more than is involved in a few fair-sized transactions in a neighboring department. Their wages certainly do not reflect a scheme of reward proportioned to effort.

Additions to Wages

P. M's.— Most stores have something of what is generally known in the trade as “P. M's.” These are varying amounts — usually not a fixed percentage — paid to salespeople who dispose of merchandise that for one reason or another is in the “undesirable” class. Broken lots, odd sizes, damaged or soiled goods, articles that are no longer stylish, etc., are frequently disposed of more quickly if salespeople are given special inducement to push them. While P. M's are much in evidence in discussion, they are in practice practically negligible as an influence on wages or an addition thereto. They are little resorted to in stores of higher grade, and from their very nature cannot be counted upon.

Commissions.— Regular commissions, however, as a specified percentage of the amount of sales, are found very frequently in stores of all grades, as an element in the wages of salespeople. There is great variety of practice among the stores of a given city, and stores of the same mercantile level. Thus many stores, regardless of departments, pay a definite percentage — $\frac{1}{2}$ per cent or 1 per cent — on all sales in addition to the regular salary. Other stores, having fixed the ratios that sales should bear to salaries in the several departments, pay a percentage on all sales exceeding the minimum that a person should sell in order to be “worth” the fixed weekly rate. Both types of remuneration are somewhat of an approach to a piece system, though there is usually no deduction for occasionally falling below the “stint” as set by the ratio of wages and sales. Some stores do not pay regular commissions, but only on the occasion of special sales, pre-holiday selling, etc.

In some departments, such as furniture, pianos, phonographs, etc., a common practice is to have all compensation to salespeople on a percentage basis. To a large extent this practice of commission payments serves to shift seasonal and other business variations from the firm to its employees. But many who maintain the practice allege it is necessary as a special reward to the more enterprising employees, and as a stimulus to increase sales and keep them up. As one merchant put it, there is no comparing the psychological effect on an employee who, because of im-

provement, in one case may be raised \$1 in his weekly rate, and the same employee receiving varying sums each week, say \$1, 90 cents, \$1.50, etc., in a separate envelope as the concrete evidence and measure of his competency.*

Commissions were found only as exceptions in up-state stores. The attitude taken by most of the merchants is typified by the statement of one employer that people who would not do their best for the business in return for a specified wage could not be relied upon to do appreciably better because of a reward that is at best but a relatively insignificant addition. Some employers, however, among those who did not practice it, seemed to be of the opinion that the best results might be obtained by paying salespeople a direct wage much less than the prevailing rate and adding a percentage on all sales. This would correspond to some types of time and bonus work systems in manufacturing and would of course have the one great advantage of stabilizing the element of sales cost. One of the large stores has had a similar scheme in force for some years in the case of boys who put up orders in the grocery department. The fixed wage formerly in effect was found to be unsatisfactory, chiefly because the size of individual orders as well as the total sales varied widely from day to day. If the number of order boys were just sufficient for the ordinary days, they could not — or at any rate would not — handle all the orders during the rush days, and it was hard to divide work fairly; while, on the other hand, if an adequate force for the busy days were kept, there would be a loss because of their idleness during the remaining days. Quick delivery was essential; but temporary help could not be relied on. After some experimenting the firm engaged a number of young men who are paid \$4 per week each in addition to a fixed percentage of the amounts of the orders put up. There is some friendly rivalry, but all earn fair wages — ordinarily about \$12 per week — and much more during some periods.

* This is well illustrated in the case of one large New York City store all of whose sales personnel are on relatively low weekly rates, supplemented by commissions. While the median rate for a typical week for salespeople was \$7.44 the median of actual earnings for the same period was \$8.95. If allowance were made for loss of time, of course the actual earnings would show a still higher level.

At the same time the personnel of the department and its organization is maintained at a level, despite increasing business.

Vacations.—Of the other forms of additional payment mention should be made especially of paid vacations. A large number of stores now have regular provision for one week or two weeks of vacation for all their help. Some have graded vacations according to the length of time the person has been in the firm's employ. In a great many instances, it was found employees prefer to work during the time they might otherwise take for vacation, in order to earn their regular wages as well as their vacation money.

Gifts.—Another item worthy of mention is the practice of some stores of giving presents — in money or in goods — at Christmas time or on other occasions. One firm having many stores gives \$5 to each employee at Christmas for each year of service, up to a maximum of \$25. In the aggregate it amounts in this case to many tens of thousands of dollars. But on the whole such gifts are not regularly established and can scarcely be counted on in considering wages paid.

Discount on Purchases.—Practically all stores allow a discount to employees on goods that they or their immediate families purchase. In the case of the large stores which can supply practically all the ordinary needs of a household, this discount serves as a very substantial addition to wages.

Credit.—Quite generally also the practice prevails of employees having a charge account with their firm, and so being enabled to purchase goods on credit and pay off in installments, without extra cost. While this of course makes more business for the store, it is none the less a real advantage to the employee.

Payment for Overtime.—The usual practice in stores is that if overtime is required occasionally or irregularly no extra payment is made. Supper or supper-money, varying from 25 cents to 50 cents, is given by many stores, but only provided the overtime exceeds a definite amount — usually if it is more than one or two hours past the closing time. But there is considerable variation.

between different stores as well as between the departments of one store. Thus, in one large up-state store, the employees in the book-keeping department alone, of all employees, received extra pay for overtime. The explanation was found to be that many years ago the present head of the department, when he was a young clerk in the office, declined to work evenings unless he were paid extra; and the firm acceded to his request. This practice, thus initiated, has continued in the department. In another large store the office force, for a while, had been paid extra for overtime. But the head of the department became convinced that there was slack work during the day, resulting in needless overtime, and the practice was discontinued.

In some respects there is a curious contradiction in the policy of employers regarding the wages of store employees, especially salespeople. Thus, all admit that actual sales should not be the sole factor in the judgment of a clerk's value to the firm; yet, in the larger stores, where a clerk's personality should count for most, because of the larger ramification of the business, and the greater interests at stake, sales records seem to be more and more depended on as a gauge of efficiency and basis for promotion. However, with the exceptions of a few departments, as already mentioned, no selling clerks have been found in retail stores whose pay depends on or is directly proportionate to sales, as is so often the case with salespeople of wholesale firms. Some stores, which do not give regular commissions on sales, keep exact records of the sales of individuals, and promptly advance a clerk to the next higher rate as soon as sales, sustained for some time at a higher level, justify. This is a sort of capitalization of the employee's selling capacity. It may make it more difficult to reduce wages in case of a falling off in sales, as was suggested by one man, but some of the firms having this system maintain that it serves as an excellent incentive to better regular work.

Deductions

Lost Time.—It may be said that, in general, store workers are not paid for absences, even those of short duration. But in many individual instances, in both large and small stores throughout the State, the management is relatively liberal with respect to "excused" absences.

Fines.— Direct fines are relatively few, and these occur chiefly in connection with tardiness, and ordinarily take the form of “docking” an employee for time lost at greater rate than is paid him for working time. A few firms, in order to maintain discipline and yet avoid the appearance of exacting petty or unfair fines, keep late comers out for an hour, or even half a day, and so compel their losing that much pay as a result of not being on time.

PROMOTION

In talking over the subject, managers frequently enumerate a large number and variety of factors that they presumably take into consideration when judging of relative efficiency of employees. Among these are capacity to learn, willingness, affability, accuracy, etc., etc. But these are all abstract concepts, not easily susceptible to quantitative determination. Thus, a saleswoman may, by her manner of showing goods or giving a sample to a shopper, win or lose a permanent customer for the store. Similarly, much may depend on the manner in which delivery men or other non-selling employees do their work. When the varied character of the work and the compensation of non-selling help is considered, the question of efficiency is seen to be still more subtle, and any attempt to evaluate exactly the services of employees is bound to fail. One cannot discover any definite, or generally applied principle affecting either wages or promotion. Personal preference of superiors undoubtedly plays a large part here as everywhere else, and for the rest a sort of diffuse judgment from general impressions of an individual's work is chiefly depended on.

One fact that throws strong light on the absence of systematic judgment of the value of individuals in store organization is the prevalent practice of employees — from highest to lowest — having to ask for a “raise.” In some cases employers have stated that they were opposed to this practice and did all they could to discourage it, even going to the extent of positively prohibiting it. One merchant went so far as to say that he would regard an employee's request for higher wages as sufficient reason for peremp-

torily discharging him. Yet employees have quite generally asserted, and apparently with good reason, that only by asking have they ever obtained an increase in wages, particularly if they came to their employers fortified with an offer of a position elsewhere.

In store employments, as in other work, the fact that women stay in the trade a relatively short time eliminates them largely from the opportunities to "better themselves" in the calling. Again, an appreciable number of women enter department store work at a comparatively late age, and are more or less content to remain where they are without improvement, once they "strike their pace." The proportion of women in responsible positions, even in lines in which women predominate, is therefore decidedly smaller than the proportion of men.

Because of its size and its multifarious organization the department store offers manifold opportunities for testing one's capacity. Salesmanship, for instance, is not one indivisible whole. There are very different varieties of it, all necessary in a large organization. Some merchants assert not only that there are "born salesmen," but that they are born with peculiar abilities, so that one may be especially adapted for selling shoes, another suits and cloaks, and so on down the line. From the nature of store requirements, employees are often switched about, and so are frequently enabled to "find themselves." Sometimes executives, who see the advisability of congenial surroundings for an employee in order to do his best, find that by transferring a person who, for any one of a thousand reasons, may have failed in one place, to another position, they can save a competent worker for the firm. The opinions of merchants as well as of employees interviewed agree that in this item of properly "placing" employees is found much of the problem — both the success and the failure — of these complex organizations. But such accomplishment requires both time and attention, with a more individual interest in employees than is always found, or perhaps even possible, in large and busy stores. But it does exist in many stores. Thus, in one instance, a young woman who had been employed in a department for three years did not get along with the new head of the department. He recommended her dismissal. The superin-

tendent, disliking to discharge her, transferred her to another department where she soon became one of the best. In another store a girl who as cashier had been unable to withstand temptation and was guilty of theft, was changed to another department where she could "start right," and where she justified her employer's judgment in giving her another opportunity.

The superintendent of one of the largest up-state stores stated that he paid close attention to the building up of individual clienteles by clerks, and that he judged the efficiency of a clerk to a considerable extent by the amount of steady patronage that she had. Such salespeople are of course valuable not only for what they directly sell, but even more on account of what their regular customers purchase in other departments.* It seems to be agreed that the custom that a salesperson can actually take along from one store to another, in a large city, is very small, if not almost nil; but it is certain that the trade of any establishment would seriously suffer were any considerable portion of the senior employees to leave.

Mercantile employment, whether in large city or small town, undoubtedly exercises a greater power of attraction over great classes of people than factory work, though the reasons for this preference are sometimes difficult to discover. Its relatively cleanly character which enables people even while at work to maintain a "presentable appearance," and the presence in ever-changing panorama of persons and activities are doubtless conducive to a sense of sociability and mental alertness. To some types of nervous organization the stir and bustle of a large store is satisfying.

However, despite the crowds of applicants for store jobs, a number of merchants have deplored what they regard as the great scarcity of higher grade talent in the supply of store personnel.

* In some stores the salespeople or the firms keep lists of names and addresses of customers, especially of regular patrons. On occasion of special sales, beginning of the season, etc., announcements are sent out in quasi-personal form. In one store, for instance, prior to the semi-annual sales, as well as on special occasions, the management urges employees to send personal letters, written in longhand, to their customers.

There can be little doubt that even from a narrowly selfish point of view employers are always looking for persons of ability, who might be advanced to the more important positions.

One manager of long metropolitan experience gave as his opinion that nowhere to-day is there such a demand and opportunity for young people — especially young men — of talent and ability to “make good” as in the modern department store.* He ascribed this not merely to the large future of the business, but to the mediocrity of those who chiefly enter it. The more energetic and ambitious youths, it is alleged, are being drawn off toward technical or other pursuits where there is apparently greater opportunity for immediate gain and more rapid advancement. Retailing does not appear to have the imaginative appeal that industry and finance present.†

* He instanced the case of a young man, who against his father's wishes, entered the store's employ when under 21, and, after a while, was given charge of a bargain counter. This became a success, and at the young man's insistence the space given him has been constantly enlarged, until in a few months' time it has become not merely one of the largest departments of the store in area, but by far the busiest and one of the most profitable.

† One cannot but be struck by the fact that many of the leading mercantile establishments are managed by men little, if any, over 40; this is only less striking than the fact that some of them have not come from the merchandising end but from advertising and other departments.

One of the oldest and most successful up-state merchants, himself a “graduate” of an Eastern firm noted for the success of its methods, deplored the difficulty of getting suitable help, either ready-trained or for systematic business education. He had again and again tried to bring up young people for responsible positions in the business. The plan was to start young men at the foot of the ladder with the announced determination and promise to enable them to learn the business thoroughly by facilitating their changing from department to department, and encouraging them to “show what was in them.” His experience both with individuals and groups has been almost uniformly disappointing. On many occasions he had picked out some promising lad for advancement, but usually when the boy did not disappoint his expectations as regards ability, he would, on reaching a certain proficiency, go off to some other establishment on the attraction of a slightly better wage. Of one group of about twelve young men, whom he had undertaken to see through the business, only one had remained throughout the first year.

The explanation offered for this phenomenon is somewhat complicated. In part, the merchant blames the prevalent tendency away from any kind of work requiring steady and faithful application to a task for the sake of a distant goal, which he regards as the great virtue of the old apprentice system. Again, modern business makes greater demands for information

DISCIPLINE

Department store work is generally done under high pressure, and it is not to be wondered at that errors creep in. The wonder should rather be that so much is accomplished under the circumstances with such great accuracy and dispatch. For the most part, the errors are trifling. Yet, an address or name incorrectly noted may cause great inconvenience to a customer. This naturally happens in urgent cases, and creates unpleasantness, even when the error is due to the customer's own negligence or mistake. Some stores have a practice of fining for errors of this sort — for instance, 25 cents for a wrong address. But these are usually the very stores in which, because of the rush and pressure of special sales, the continuousness of work with little time to rest, and the wear of dealing with crowds, the likelihood of error is inevitably increased.

Friction between co-operating units and explosions of temper are to be humanly expected. But from the point of view of an organization that works so much in the open and is so dependent upon favorable public opinion, they cannot be tolerated, though injustice often results. This is true with most force of those numerous instances when differences arise between employees and patrons. It requires not only tact, but often a Solomonic genius in common sense to deal fairly. Inconsiderateness and unreasonableness is so much the rule on the part of the buying public that employees, already tired and perhaps exhausted, are worried if not maddened toward the end of the day. On the part of customers there exists, to an extent much greater than should be tolerated, an unfair and exacting attitude toward store employees, coupled frequently with a desire for special privilege. One of these — the commonest and least excusable — is the demand to be waited upon "out of turn." Those in authority are under such

than used to be the case, and the schools with all their improvements have failed to parallel the actual advances and changes in industry and commerce. To a large extent failure is also attributed to the older age at which young people now started in business, necessarily as novices, so that they soon become dissatisfied with their progress, since they could not be paid, while learners, as much as others who might be doing a given work. Unhealthy amusements, detracting from steadiness and efficiency, while at the same time creating more pressure for promotion and money-making, are given as serious factors in the problem of adequate and proper labor supply.

a strain to avoid anything that might alienate a customer that much injustice — often unwillingly — is done to employees. In cases involving questions of veracity, the customer's part is too often taken. Employees are sometimes reprimanded by their superiors in the presence of colleagues, and even of customers. The self-respect of many a faithful employee has been wounded in this way, with resulting disappointment and enmity that cannot but affect adversely the quality of service rendered thereafter, if the employee remains in the organization.

The better stores have abolished the practice of fines, and their aim is to develop a personnel that does not require such discipline. In some instances where fines are still imposed for violation of rules, the collections are turned over to the employees' benefit fund. But the ill-will resulting from fines is doubtless making for the abolition of the practice.

While department stores in up-state cities are not comparable with those of New York City in size, they differ in other conditions far less from metropolitan stores than the difference in size would lead one to expect. In cities like Buffalo and Rochester, for instance, where there are stores having more than 1,000 employees each, the relation between employers and employees is necessarily indirect and impersonal. But even much smaller businesses already require a mechanism for their operation; and if they are to be continuous despite inevitable changes in personnel, much of what might otherwise be discretionary practice must be reduced to definite rules. The essence of successful store management is harmonious coöperation. Where many people are employed, some formal discipline is essential. But to some persons established rules are repugnant; and they frequently work unfairly in individual cases, especially when the reasons for them are not known or are misunderstood.

WORKING CONDITIONS

In its physical aspect, a modern department store appears to be a pleasant place to work in, for most of its extent and arrangement is primarily devoted with a view not to its employee's interests and approval but to those of the public. The latter is much impressed by the spaciousness, good lighting and other features which tend to encourage shopping by making it pleasant.

Few even of thinking patrons ever stop to realize that the work involved in even the pleasantest parts of the store and at the least tiring of the departments is nevertheless real work. Customers are provided with comfortable seats but even when seats are furnished for employees and permission given to use them, little use can be made by employees because they must keep moving in order to do their work and the more busy they are the less time they have for rest.

One aspect of the behind-the-scenes character of the work of so many store employees is that their working conditions are inferior in many respects to those under which salespeople work. Many a store that makes an agreeable impression on the buying public has persons working in its manufacturing, bookkeeping, packing, delivery and other departments under conditions that are anything but praiseworthy. "Economies" of various kinds are practiced on the non-selling department.

Another noticeable feature is the difference in personnel of the sales and non-selling divisions. In stores of any size, the former are overwhelmingly English-speaking persons, and usually people of American birth. In the other store departments, notably the manufacturing, no such distinct preference is discernible.*

Hours of work are usually different; in the case of the delivery department, for instance, being often very long. Even in the non-busy seasons it is common to see drivers out at 9 or 10 p. m. While some of the non-selling employees are obliged to wear uniforms, the standard of dress as of general behavior impresses one as below that of people "on the floor." The physical requirements of their work are usually severer for both men and women than in the case of salespeople; while frequently skill and deftness as well

* In one of the largest and best up-state stores, the tube room is a woven-wire cage in the basement, adjacent to the main stairway. Aside from the bad ventilation and the dust that settles there, the unceasing noise overhead and the people marching up and down the stairs constitute an added strain as well as aggravating distraction leading to errors in making change, etc. In one New York City store that ranks high in the business community, the main bookkeeping division is located in one long room, where some 300 workers are crowded so close together as almost to interfere with each other in their movements. The ventilation is bad and the lighting is very poor; the noise of machines, telephone, handling of papers, etc., is almost deafening. Employees here sit practically immovable on their stools during the entire working day.

as close and sustained application are essential. This is illustrated in the case of the garment alteration employees, whose work is often hurried as well as "particular."

As one studies the conditions of employment and the varying practice of firms, the impression deepens that the articulation between selling and non-selling divisions is not as complete as might be desired or expected. Quite generally they are divided into many departments under separate heads and with divergent practice. Thus there is rarely any uniformity of policy regarding hours, dress, pay for overtime, vacations, etc. Usually, though not always, the less favorable arrangements are the lot of the non-selling employees. There are some conspicuous exceptions, principally in the case of the organized mechanics of various kinds who belong to labor unions, and who insist on the same conditions in respect to wages and working hours as their fellow craftsmen in other industries.

Hours

The prevailing practice in regard to hours of work in department stores of larger cities in the State has for sometime tended to bring the actual working hours per week down to or well within the 54-hour provision of the present law. In the downtown centers of New York City, as well as in Buffalo, Rochester and Syracuse, and other cities, the tendency is toward 9 o'clock opening in the morning. The closing hour has been practically standardized at 6, with few exceptions at 5:30. Many stores however still open at 8:30 and occasionally at 8. The actual presence of employees in the stores is always required at an earlier period, varying from five to twenty minutes prior to opening; and their actual egress from the stores is regularly delayed five to fifteen minutes or more after the store is closed to customers.

In some sections of New York City longer hours prevail in the neighborhood stores, even those of considerable size. Stores are still found that are open for two or more evenings a week. The same condition exists in up-state cities. Regular night work, even on Saturday night, with the exception of the days immediately preceding Christmas, is being gradually done away with, though Saturday evening opening is still quite widespread both in New York City and other localities.

The Saturday half holiday during two or three summer months

has been gaining in favor. A further development, tried for some years by one store in New York City and imitated in Philadelphia, and elsewhere, that of closing all day Saturday during part of the summer, has been put into effect during the present year by an added number of large stores in New York City, though it cannot be expected that the movement will become general. So far as observed, only one large up-state store is closing all day Saturday, but as a partial offset it is open until 9 on Friday evening.

The stores in up-state cities have been gradually removing their objections to a shorter day and have been more or less willingly shortening hours. In Rochester, for instance, within the year, Saturday evening closing has been accomplished through the initiative of employers, with the encouragement and help of the Chamber of Commerce. In Buffalo, the closing of the downtown stores on Saturday evening was the most definite result of the employee's strike in the spring of 1913. The stores of the chief working class quarter in Buffalo, on the East side, have however continued to keep open on one or more evenings.

In Syracuse the principal stores have an agreement for 9.15 closing on Saturday evenings. The leading merchants would prefer to keep closed on that evening, but others feel that much loss of business would result. Here and generally throughout the State it is maintained with a show of reason that even with extensive Saturday half holiday in industry, Saturday evening opening is socially necessary in order to enable workingmen's families to do their purchasing. Cities with much suburban business, like Syracuse, could probably not avoid considerable loss by closing; while in smaller communities there does undoubtedly exist a general demand for Saturday evening opening.

As against the longer work day in the smaller cities it should in fairness be said that the tension of the work is much less in the relatively small stores up-state than in New York City. Compared with busy metropolitan stores, it cannot be doubted that up-state employees have far less of both mental and physical exertion. Most of the forenoons are drearily dull, and even in the busy seasons there are many slack days. In New York City stores, on the other hand, when selling is at a low ebb, the number of employees are generally reduced, and the remaining employees are expected to have enough to do to keep busy.

Overtime

Up-state stores have appreciably longer working hours than prevail in New York City, chiefly because of the practice of Saturday evening opening. Overtime, as such, however, is not general or frequent. That extra work which is necessitated in large centers owing to the almost continuous "special sales" is either non-existent or is largely obviated by the fact that employees have much more time during regular business hours to keep up with their work than is possible in the larger cities.

Taken as a whole, overtime affects the selling personnel relatively little. It is much more frequent, as well as more severe, for the employees in the various non-selling branches. The receiving and shipping departments, for example, must do their work expeditiously regardless of periodic and sudden increases of material to be handled. The delivery employees must cover their routes despite weather conditions and great variation in the number of parcels to be delivered. In the office divisions the periodic reports and audits, and the huge amount of bills, statements and correspondence concentrated usually at the end of every month make overtime work imperative in almost every establishment.

WELFARE WORK

Under this head is usually included a great variety of store activities affecting employees but not directly related to the store's commercial functions. The subject has, however, been so much discussed, and the different activities have been described so many times in detail, in reports of social service investigators and organizations as well as in the second report of the Factory Commission, that only brief comment appears to be called for here.

The term "welfare work" is not one the meaning of which is settled in usage. What some establishments class under "welfare work" other firms have or do as a matter of course. Others again, class as welfare work improvements in physical conditions that first class stores provide as a matter of course. Most of the activities comprised in the term "welfare work" are supplemental of what we are accustomed to see done by groups or by society as a whole. Such are the clubs and other store organizations for the fostering of sociability, athletics and other

forms of healthful recreation. Others, such as mutual benefit and savings funds, nursing and medical service, etc., are special manifestations of activities that society is only gradually taking up. But it should be noted, for instance, that in large retail establishments rest room and hospital facilities are quite as urgently needed and are as much designed for the use of customers as of employees. Some of the educational activities, such as classes for teaching employees to write plainly and to perform accurately the simple arithmetical operations necessary for their daily work, are making good the deficiencies of previous schooling. Classes in salesmanship, departments, etc., even though the knowledge and skill acquired remains a personal possession of the employee to be transferred when he leaves, presumably inure directly and definitely to the benefit of the store.

Insofar as welfare work is merely an extension of the business organization, it calls for no special comment. Most merchants who have introduced "welfare features" assert that though not intended to be direct contributors to profits, they are nevertheless "paying investments." A type of this is the restaurant or lunch room for employees, now a fixture in most large stores as to other kinds of businesses. The lunch room may not be quite self supporting, if all elements of expense that should be taken into account in an entirely separate business are considered; but it is presumably contributing a positive—though quantitatively indeterminate—surplus to the establishment in many ways. The time saved in going to and from lunch makes for greater promptness; and the subsequent work is unquestionably better because of the additional rest made possible. It should also be noted that, with growing sentiment in favor of better conditions for people at work, "welfare work" very properly has a definite, unmistakable value as an advertising outlay. It becomes a not inconsiderable part of the intangible but very real assets carried on books as "good will"—they might with better reason be called "good repute."

3. MEMORANDUM ON MUTUAL AID ASSOCIATIONS IN NEW YORK CITY STORES

(Prepared by the State Insurance Department)

STATE OF NEW YORK — INSURANCE DEPARTMENT

New York Office, 165 Broadway

WILLIAM T. EMMET, *Superintendent of Insurance*

NEW YORK, *January 12, 1914*

HON. JAMES J. HOEY, *Second Deputy Superintendent, 165
Broadway, New York:*

SIR.—As instructed by you, I respectfully report the results of an examination into the conduct and methods of management of several mutual aid associations for the benefit of employees of various department stores in this city.

Specifically I inquired into the methods of collecting dues and assessments, the methods of investing these, the segregation of funds and separation of accounts, the percentage of expenses and the legal interests which members had in the balances.

The investigation was prompted by complaints regarding the fund maintained for the benefit of employees of Kesner & Company, the Fourteenth Street Store, and the Simpson-Crawford Company, where the funds of the association had either been deposited in the private banks of the firm itself, or mingled with the firm's money in the same account, so that the association now stands in the relation of creditor to the defunct firm or to the private banks maintained by these firms.

At the outset it may be stated that wherever in operation, these associations are doing a philanthropic work of great scope and merit at a minimum cost to the persons concerned in them. In some of the large stores, notably Gimbel's and Saks, no mutual aid associations are maintained, but the stores, I was informed, do maintain at their own expense welfare departments to attend to the needs of employees in misfortune. In some other stores, the work of the mutual aid association is supplemented by that of welfare committees maintained at the expense of the firm, while in others this work is left to the association itself, the firm rendering assistance. In all cases where they are established however, the influence of the firm is exercised toward increasing the

revenues through the medium of the annual entertainments, the proceeds of which go to supplement the amount collected as dues and assessments.

The general scope and aims of all of the associations are similar except that some are a shade wider and more ambitious than others, but the methods of investment are different. Some keep the funds of the association altogether apart from those of the house; others mingle them; while in other cases the moneys are deposited with the private banks of the firm where such banks are maintained and no separate bond is given by the treasurer.

In nearly all cases the employee is compelled to enter the association at the outset of his employment and on separating from the service of the firm, no matter what the cause, he ceases to be a member. This can work no real hardship as moneys are paid out almost as fast as they are taken in and the balances, while in some instances substantial, are still small compared with the annual disbursement.

There doesn't appear to be in any of their constitutions, so far as I have been able to ascertain, a provision vesting the funds on hand in the association in the event of the firm's failure. Possibly this is due to the reluctance with which any firm or any employees of such firm look forward to the possibility of failure. In the case of incorporated associations, such a provision might be unnecessary as the balances might legally vest in the association, but all of them are not incorporated, and when the firm does fail, as firms sometimes do, the employees' connection with the firm ceases and ipso facto interest in the association's funds would seem to be brought to a termination.

It should be noted, however, that the pro rata interest of employees in balances amounts to not more than a dollar or two, and compared with the records of benefits to the credit of such associations since their organization, is almost infinitesimal. Yet, as a matter of right, the funds clearly belong to the employees and should be given some measure of protection.

The operating expenses of all of the associations are relatively small. For instance, in Wanamaker's, where the annual disbursements were \$19,000, the only expenses incident to the collection and disbursement of such a fund were the salary and carfare of a woman employed at \$30 a week, who unites the functions of

financial secretary and that of welfare agent. The charges amount to but 8½ per cent of the disbursements and this is typical of the others. In Macy's the charges were somewhat higher, apparently on account of the fact that medical fees are charged in with the expense account. In some stores a physician is maintained who gives his services free to the employees and prescriptions given by him are filled at the drug department of the store without charge. In some instances, too, the welfare agent is paid by the firm.

The scope of the associations is always the payment of benefits in the event of illness or of death. The membership is generally divided into classes depending upon salaries paid, while the fees and the benefits depend on which class the employee happens to be in.

Dues and assessments are invariably deducted from the salaries, receipt being given on the pay envelope which is the only documentary evidence furnished the employee of his connection with the association.

Officers are chosen from among the employees by the members themselves generally, but sometimes the firm designates a director, and generally, but not always, the remaining directors are chosen from the heads of sections or their assistants. Sometimes special cases are relieved and the money for their relief obtained by additional assessment. This, however, is not a general feature among these associations. The firm generally maintains toward the association a spirit of paternal encouragement, sympathy and support. The results obtained by the members are much better than an independent organization could give because of the low operating expenses, the assistance rendered by the firm in helping out the work of the association and the moneys derived from the proceeds of entertainments and the like.

The imposition of any restrictions or additional duties might possibly interfere with the general usefulness of these associations, necessitating additional work which might entail an added expense. As conditions now stand these associations, considering their past record, are more than 99 per cent good, with only the possibility of abuse in the remaining 1 per cent.

If any additional legal restrictions be imposed, they should not go beyond a requirement for the approval of the constitution

by the Superintendent of Insurance. These constitutions should provide that in the event of the firm's failure, the funds should vest in the association for the benefit of those entitled to participate in the benefits at the time of failure. The treasurer ought to be bonded in an amount double that of the average balances and the funds should be kept absolutely distinct from those of the firm itself in all cases. In most instances, this is now done. The fee for a bond would be the only additional expense and that would be almost negligible.

I should not care to recommend any additional supervision by the Department of Insurance that would either add expense or make the firms feel that an additional burden had been imposed upon them in regard to these associations. They are of their nature philanthropical, calling for the active sympathy and encouragement of the firms themselves, and any restrictions which would hamper these would, it seems to me, interfere in a measure with the good work that is now being performed.

Respectfully submitted

(Signed) JAMES P. CONWAY

Chief Examiner, Brokers Bureau

STATE OF NEW YORK — INSURANCE DEPARTMENT

New York Office, 165 Broadway

WILLIAM T. EMMET, *Superintendent of Insurance*

NEW YORK, *February 16, 1914*

HON. JAMES J. HOEY, *Second Deputy Superintendent of Insurance, 165 Broadway, N. Y.:*

SIR.—On January 12, 1914, I furnished you with a report of the results of the investigation made by myself into the conduct and methods of management of a number of mutual aid associations for the benefit of employees attached to various department stores in this city.

At the request of Dr. Howard B. Woolston, Director of Investigation for the New York State Factory Commission, the department made further inquiries from all the department stores of the city in regard to the purposes and methods of management of all mutual aid associations connected with these department stores. To that end a letter was addressed to the manager of each store asking for specific information, all of which has been readily given.

A circular letter was addressed by the department to sixteen stores and replies were received from all of them. Of these sixteen stores, eleven maintain mutual aid associations and five do not. The stores which maintain such associations are:

B. Altman & Company, F. Loeser & Company, Lord & Taylor, A. I. Namm & Son, R. H. Macy & Co., John Wanamaker, Stern Bros., Koch & Company, Bloomingdale Bros., James McCreery & Co., Greenhut-Siegel Cooper Co.

Those which do not maintain mutual aid associations are:

Abraham & Straus, James A. Hearn & Son, A. D. Matthews Sons, Gimbel Bros., Saks & Company.

The smaller stores were not circularized.

The name of each society indicated its connection with the store where it was organized, and the general purpose of each seems to be of the same character, viz. to provide and maintain a fund for the purpose of aiding the members of the association during illness or distress, and to provide for their families a benefit in case of death. All of them, excepting that connected with F. Loeser & Company, were governed by constitution and by-laws adopted and enforced by the members of the association or the board of directors.

Practically all of the constitutions provide for an annual meeting of all the members of the association and more frequent meetings for the board of directors. Sometimes the directors meet quarterly, sometimes monthly, sometimes semi-monthly. In only a few cases is there any provision made for special meetings.

In five out of the eleven stores, all of the employees of the store belong to the association except transients or temporary employees. In these cases the constitution and by-laws provide that each employee must join the association after a given time.

In Altman's about two-thirds of the employees are members; in Loeser's one-third; Lord & Taylor's 30 per cent; Stern Bros. one-sixth; Koch & Company one-third, and James McCreery 45 per cent.

The dues in all excepting two cases are deducted from the weekly payments. The employees in all the stores are classified into grades, some of the stores having as high as four classifications and others two and three. In McCreery's store there is only one.

In the two cases in which deductions are not made, viz: Stern Bros. and Bloomingdale Bros., members in arrears for dues after one month are suspended from all claims on the society.

In Altman's employees in some cases can maintain their membership even after leaving the firm, provided they continue to pay their dues. Otherwise, failure to pay dues will result in suspension.

The dues amount generally from 5 cents to 75 cents monthly.

Very few special assessments are made in connection with any of the associations. Where they are made, as in John Wanamaker's and Stern Bros., the purpose of the levy is to pay death benefits. In Altman's the constitution provides for such an assessment when the amount of the death benefit fund falls below \$100, but no assessment has been levied in years.

Additions to the fund frequently come from entertainments, donations and bequests, etc. The fund in Altman's was augmented during the past year to the extent of \$50,000 by bequest from Benjamin Altman.

In Wanamaker's the fund is augmented every year from the moneys derived by an annual entertainment.

Two hundred dollars was derived from an entertainment under the auspices of the association maintained in connection with Namm & Sons last year.

The association having the largest amount of assets is that connected with Altman & Company which has \$80,000, \$75,000 of which is invested in bonds, and \$5,000 in a trust company. Loeser's has \$5,000 on hand deposited with the firm. Lord & Taylor has \$2,000 invested with the firm. Namm & Company, \$453 deposited with the firm. Wanamaker, \$4,900 deposited with the corporation of John Wanamaker. Stern Bros., \$3,500 deposited with the firm. The balance maintained by the association connected with Koch & Company is not given but is deposited in the Corn Exchange Bank and the Empire Savings Bank. Bloomingdale's has \$34,781 of which \$12,000 is invested in mortgages. The balance is deposited in bank drawing interest. McCreery has \$8,750 deposited with the firm. Greenhut-Siegel Cooper Company has approximately \$20,000, some of it invested in securities and some deposited in bank.

All of these funds carry interest bearing from 4 to 6 per cent.

Financial statements in practically every case are made annually in the ordinary way, and the by-law provide for an audit in the case of the Bloomingdale Association.

The Altman Association pays a death benefit of \$100 and \$5 and \$10 weekly for sick benefits for ten weeks. Loeser & Company pays a death benefit of \$100 where deceased has been a member for less than a year and \$300 where he has been a member more than a year. No sick benefits are given here. Lord & Taylor pays death benefits of \$150 and \$75, and \$10 and \$5 per week for eight weeks out of twelve months to sick members according to the grade. In Namm & Company the sick benefits are one-half of the member's salary not exceeding \$6.50 a week. The death benefits are \$50 and \$100 according to the grade. R. H. Macy & Company pay sick benefits for from five days to eight weeks in a year, and also pay death benefits, the amount of which is not stated in either case. John Wanamaker pays sick benefits amounting to \$2, \$4, \$5 and \$7, not exceeding ten consecutive weeks, nor more than thirteen weeks in the year. The death benefits are \$100 and \$200 according to the grade. Stern Bros. pay sick and death benefits—sick benefits of \$5 and \$10 a week not exceeding eight weeks in a current year according to grade, and death benefits of \$100 and \$50, provided they are approved by the board of directors.

No information on this point was forthcoming from Koch & Company's association. Bloomingdale pays \$6 a week not exceeding twelve weeks, and a member may borrow \$50 while in distress. Death benefits are \$30, \$40 and \$50. James McCreery members incapacitated by accident or sickness receive \$10 for the first week, \$5 for the second week, and \$10 for each succeeding week for a period not to exceed eight weeks during any twelve months. One hundred dollars is payable at death.

In Altman & Company the association provides the services of an oculist when required. In Loeser & Company the association keeps a doctor in the store between 9 and 11 each day and pays him a salary. In A. I. Namm & Company a sick room is maintained on the premises by the association where medicine and treatment are given free of charge. There is a nurse in attendance at all hours during business hours and a doctor in attendance each

forenoon. A physician visits the homes of the members at the expense of the association. The salaries of the nurse and the doctor are charged to the association. In R. H. Macy & Company a corps of physicians are maintained whose salaries are charged to the association.

Welfare work done by the associations is frequently supplemented by other kinds of welfare work done by the stores. Altman & Company maintain a doctor and trained nurse in attendance daily for employees requiring their services. These are maintained at the expense of the store. Loeser & Company keep a nurse employed by the firm in constant attendance in the sick room. A. I. Namm & Co., R. H. Macy & Company and Bloomingdale Bros. maintain lunch rooms for employees where food is served at cost. In Namm & Company's fresh milk is supplied free of charge every afternoon to all employees under sixteen years of age. Bloomingdale Bros. maintain a summer vacation cottage at Far Rockaway, and some of the companies maintain beds in hospitals.

The relation of the expenses of the associations to the income always depends upon whether or not the doctors' and nurses' salaries are charged to the association. In Altman & Company and John Wanamaker where they are not, the ratio of expenses to dues is from $5\frac{1}{2}$ per cent in Altman's to $8\frac{1}{2}$ per cent in Wanamakers. In the other cases where a part of the work of the association is the furnishing of the doctors and nurses, the expenses are from 20 per cent to 39 per cent. In Lord & Taylor's it is 20 per cent; Macy's 24 per cent; Bloomingdale's 21 per cent; A. I. Namm's $34\frac{1}{2}$ per cent; Loeser's 39 per cent. The ratio is not given from the other stores.

In all excepting a few instances, membership in the association ceases when the employee terminates his connection with the firm. There are a few cases where the employee can maintain his membership for a short period.

In all cases the relationship between the firm and the association is friendly, not to say fraternal, except in James McCreery and Koch's, where the firm disclaims any connection with the association.

Respectfully submitted,

JAMES P. CONWAY

Chief Examiner

III THE SHIRT INDUSTRY

EXTENT AND CHARACTER OF THE BUSINESS

We have no good recent statistics on the number of persons engaged in shirt making in New York State. The most recent official data are given in the United States Census of Manufactures for 1905. On page 17 of Part I, we find the following comparative summary for the United States as a whole:

	1880	1890	1900	1905
Establishments.....	549	869	*690	641
Wage earners.....	25,687	31,207	36,622	36,499
Wages.....	\$5,403,696	\$9,193,495	\$10,894,327	\$11,233,302
Cost of materials.....	\$11,306,444	\$15,704,353	\$22,950,564	\$25,639,402
Value of products.....	\$20,130,031	\$33,638,593	\$47,121,530	\$50,971,105

This table shows the expansion of the business during twenty-five years.

The New York State Industrial Directory for 1912 gives the following summary of persons engaged in the manufacture of men's shirts, collars, and white goods throughout the State:

Number of factories.....	870
Office force.....	700
Shop men (16 years +).....	8,270
Shop boys (14-15 years).....	74
Shop women (16 years +).....	22,076
Shop girls (14-15 years).....	366
Total employees.....	31,486

It is obvious, however, that this number includes persons who are engaged in making other articles besides shirts, such as boys' blouses, pajamas, and underwear.

The nearest thing to recent official figures is found in the Occupation Statistics of the Thirteenth Census. On pages 495 and 498 are given the numbers of semi-skilled operators in shirt and collar factories in the State of New York. There were recorded in 1910, 4,921 men and boys and 8,116 women and girls. With these figures before us we can now estimate the size of the industry in New York State and form some opinion of the proportion of the trade which was covered by the present survey.

* Neighborhood shops no longer included.

During December and January last, we investigated 76 shirt factories in New York City. During the months of May and June, we took payrolls from 36 other plants in various cities up-state, principally about Albany and Troy. These factories included nearly 12,000 employees engaged in the making and laundering of shirts. About 6,600 were found in New York City and the rest were scattered throughout the State.

We found the trade divided into two main classes: First, those factories which make men's working shirts of cheap chambray or sateen, and secondly, those which make the more expensive dress and negligee shirts of various materials from cotton to silk. The former trade is characteristic of New York City; the latter is particularly the line followed in Troy and its outlying centers.

We also found that factories perform the whole or parts of the operations involved in cutting, sewing and laundering shirts. In some places, cutting only is done and the sewing is let out to small contract shops or is sent to subsidiary plants in towns throughout the State or beyond its borders. In other places, we found that while shirts are cut and sewed in the shirt factories, they are laundered in commercial plants which do work for the trade. The large establishments in Troy generally do all branches of the work and have outlying factories beside. Many of the New York houses do only cutting and send their goods to the contract shops of the east side, or to factories in Pennsylvania or elsewhere.

We found no traces of a comprehensive trade organization among manufacturers throughout the State, although in the plants in Troy the owners seemed to have a very close understanding. Among the employees we found only vestiges of a feeble union. Organization among workers seems to have failed almost completely either because of the character of the workers themselves, who are largely women and foreigners, or because unionism has been vigorously opposed by the employers.

Workers are recruited in the main by advertisements in the paper, by signs on the door, or through the agency of friends or acquaintances already at work in the factory. For the ordinary kind of work done, no special qualifications are required except good health, neatness and dispatch.

PERSONNEL

Table I shows the division of factory workers according to age and sex groups. The figures in all the tables are for New York State unless otherwise stated.

TABLE I
AGE AND SEX OF WORKERS

	TOTAL		MALE		FEMALE	
	Number	Percent of all	Number	Percent of all	Number	Percent of all
Total....	11,808	100.	2,833	23.8	9,075	76.7
<i>Age group:</i>						
14-15.....	320	2.7	28	.2	292	2.5
16-17.....	1,660	14.	180	1.5	1,480	12.5
18-20.....	3,092	26.2	414	3.5	2,678	22.6
21-24.....	2,205	18.6	471	4.	1,734	14.6
25-29.....	1,531	13.	515	4.4	1,016	8.6
30-34.....	964	8.1	371	3.1	593	5.0
35-39.....	897	7.6	350	3.	547	4.6
40-44.....	540	4.6	228	1.9	312	2.7
45-54.....	544	4.6	220	1.9	324	2.7
55-64.....	130	1.1	48	.4	82	.1
65+.....	25	.2	8	.....	17	

It is clear from the foregoing figures that women far outnumber men, three-fourths of the working force being composed of females. As to age, more than three-sevenths of the whole number of employees are minors. The males, in general, are older than the females. Nearly one-half of all the female workers are girls under 21 years of age. This fact at once explains the difficulties of organization and the low wage payments, which will later be analyzed.

The following table shows the division of workers according to nativity:

TABLE II
NATIVITY OF WORKERS BY SEX

	Male	Female	Total	Percent of all
Total.....	2,827	9,088	11,915	100.
Native.....	855	5,025	5,880	49.3
Foreign.....	1,972	4,063	6,035	50.7
Russian.....	1,132	1,550	2,682	22.5
Italian.....	366	1,572	1,938	16.5
Austrian.....	163	282	445	3.7
Irish.....	25	163	188	1.6
German.....	28	82	110	.9
Hungarian.....	67	41	108	.9
English.....	24	78	102	.9
31 other foreign.....	167	295	462	4.3

It is clear from these figures that foreigners predominate in the trade as a whole. Nearly 70 per cent of the males are foreign born and only 45 per cent of the female employees. Among foreign born, Russians and Italians clearly predominate, constituting over three-fourths of all those born abroad. This preponderance of Jewish and Latin workers reflects in the main the conditions existing in New York City, where over three-fourths of the factory workers are of foreign birth. In the smaller cities and towns up-state, 90 per cent of the workers are of native birth.*

Considering next the distribution of these persons by age groups and nativity, we note that there are more native than foreign born children of both sexes. Among young persons from 16 to 20 years of age, the foreign born outnumber the natives, three to two. Among adults, there are twice as many native as foreign women and twice as many foreign as native men. In the main, however, the trade seems to be composed of native women, foreign girls and foreign men, in the order of importance shown in the following table:

TABLE III
NATIVITY OF WORKERS BY SEX AND AGE GROUPS

NATIVITY	Sex	TOTAL		14-15		16-20		21+	
		Num-ber	Percent of class	Num-ber	Percent of class	Num-ber	Percent of class	Num-ber	Percent of class
Native.....	Male.....	853	100.	21	2.5	208	24.5	624	73.
	Female.....	4,974	100.	219	4.4	1,691	34.	3,064	61.6
Foreign.....	Male.....	1,966	100.	7	.4	382	19.4	1,577	80.6
	Female.....	4,051	100.	71	1.7	2,450	60.5	1,530	37.8

Finally, considering the conjugal condition of the workers, we find that there are many more single women than men. This is doubtless explained by the fact that the women as a whole are younger. Over one-half of the men are married while only one

* See Statistical Appendix, Table 87.

married woman in nine female workers is reported. The following table shows that widows are more numerous than widowers. Only 1 divorced man and 46 women are recorded.

TABLE IV
CONJUGAL CONDITION BY SEX

SEX	SINGLE		MARRIED		WIDOWED AND DIVORCED	
	Number	Percent of sex	Number	Percent of sex	Number	Percent of sex
Male.....	1,339	47.5	1,438	51.2	35	1.2
Female.....	7,468	83.1	1,007	11.1	521	5.8
Both.....	8,807	74.5	2,445	20.7	556	4.7

OCCUPATIONS

The following table shows the division of employees in shirt factories throughout the State, according to the general character of the work which they perform:

TABLE V
NUMBER OF EMPLOYEES BY CHARACTER OF WORK

DIVISION OF INDUSTRY	Male	Female	Both
Factory and laundry....	2,840	9,116	11,956
Office.....	195	237	432
Plant.....	297	29	326
Shipping.....	295	20	315
Total.....	3,627	9,402	13,029

It is clear from this table that the manufacturing and laundering of shirts engages by far the greater number of people. In this branch of the work women predominate. An account of the office, plant and shipping forces is left for a later section of the report. It is sufficient here to mention that in the office, male and female employees are rather even in numbers, while in the plant and shipping divisions men greatly predominate.

Confining our attention to employees in the factory group, we here present a summary analysis of the number of persons of each sex who are engaged in the main divisions of the work.

TABLE VI
NUMBER OF EMPLOYEES IN FACTORY GROUP

DIVISION OF FACTORY	Male	Female	Both
Cutting.....	629	46	675
Sewing.....	1,016	7,200	8,216
Laundry.....	1,195	1,870	3,065
Total.....	2,840	9,116	11,956

This table makes it evident that sewing is the most important part of the trade numerically, and that here women and girls outnumber men and boys, seven to one. In the cutting department, which is much more skilled work, male operatives greatly preponderate, while in the laundry, which is comparatively unskilled, the numbers of the sexes are not greatly different.

We may now briefly consider the main operations involved in cutting, sewing, and laundering a shirt for the market. Cloth is first stretched in layers several dozens of thicknesses, on long tables. This work is done by young helpers to the cutters. The marker then lays out the pattern upon this cloth and traces the outlines upon its surface. This work is done by skilled men, because any lack of judgment in placing the patterns may result in large losses of materials. After the batch has been laid out, the lines traced upon the cloth are cut either by hand with a sharp knife, or in some cases by a blade which is worked up and down by an electric motor. The outlines of the parts of the shirt having thus been cut, a trimmer may then follow to make the curves and corners more smooth and exact. The parts are then labeled and tied up ready to go to the sewing room.

In the sewing and finishing of shirts, from 20 to 40 operations may be involved according to the kind of garment and the organization of the factory. The work is highly specialized in the more developed plants. We found in some of the large estab-

ishments as many as sixty different kinds of work being done by different persons. Very briefly the principal operations in making a shirt are these:

The front pleat and the pocket, if any, are attached, or the bosom is sewed ready for insertion. The back is set on to the yoke and a label sewed in. The sleeves are pieced by setting a gore under the arm, and the facings are attached to the opening at the bottom. The cuff is made by stitching together the two sides and the lining. It is then usually turned by hand, sewn down on the right side and attached to the sleeve. The neckband is made in much the same way as the cuff. Sometimes, however, both cuff and collar band are creased and sewn at once on the right side. The buttons and buttonholes are marked and sewn at the proper places, and then the different parts are ready for putting together. The back and front are joined at the shoulder seam; the sleeves are set in; and then the shirt is closed by felling the inside of the sleeves and the front and back down to the bottom. A line of stitching is then put around the skirt and the shirt is ready for examining, cleaning and repairing, if any be needed.

Dress shirts and the better grades of negligee garments are sent to the laundry where they are washed and starched by hand or machine. After this they are hung in steam closets and are then ironed by hand or machine. Finally, they are again inspected, folded and packed in boxes for shipping.

Let us now consider briefly the kind of people who perform these various operations. First, with regard to age and sex, the accompanying table shows that most of the markers and cutters are men in the prime of life. Their helpers are usually young men who are learning the trade.

Cutting is really a skilled occupation and requires some kind of apprenticeship before the responsibility of cutting many thicknesses of valuable cloth is given to a man. However, we have found that in some of the small factories, especially in New York City, very young men do this work. In other places persons have described themselves as cutters, who could scarcely be classified in that category in the better plants.

TABLE VII
OCCUPATION BY SEX AND AGE GROUPS

AGE IN YEARS	OCCUPATION														AGE IN YEARS
	Markers		Cutters		Trimmers		Cutters' helpers		Foremen or Forewomen		Operators		Floor work		
	Male	Fe- male	Male	Fe- male	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
14-15.....	.....	.....	.....	.....	1	.....	10	5	.....	.....	7	114	8	120	.....14-15
16-17.....	1	.....	12	.....	4	1	62	12	.....	3	39	942	18	253	.....16-17
18-20.....	3	.....	45	.....	21	1	72	14	7	17	127	1,973	18	187	.....18-20
21-24.....	9	.....	88	.....	5	1	27	4	14	37	143	1,312	7	63	.....21-24
25-29.....	7	1	70	1	10	1	10	2	22	26	154	728	3	34	.....25-29
30-34.....	5	.....	44	.....	.....	1	5	.....	25	22	103	399	1	20	.....30-34
35-39.....	9	.....	32	.....	2	.....	6	1	40	17	106	341	1	32	.....35-39
40-44.....	4	.....	17	.....	3	.....	3	.....	18	13	57	176	2	26	.....40-44
45-54.....	4	.....	23	.....	.....	.....	4	1	15	14	48	185	9	26	.....45-54
55-64.....	.....	.....	6	.....	1	.....	1	.....	5	.....	6	42	7	12	.....55-64
65 and over..	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	10	3	5	.....65 and over
Total.....	42	1	338	1	47	5	200	39	146	149	790	6,222	77	778	Total

TABLE VII
OCCUPATION BY SEX AND AGE GROUPS (concluded)

In the sewing department, foremen and forewomen are usually persons of mature years and experience. The majority of operators range among men from 21 to 40, and among women from 18 to 30.

The rougher floor work, which consists in the main of bringing materials and removing completed work, is mostly done by young people, although a few old retainers are kept for this service.

In the laundry the ironers, the most skilled and best paid operatives, are mostly men, because the work is very heavy. The starchers, on the other hand, are almost all women; the few men work on the machines. Laundry helpers who do the washing and miscellaneous work of various sorts, are of all ages.

In the final stage of examining and packing the shirts, we find again that women outnumber the men and they are mostly young women whose keen eyes and deft hands are best adapted for this purpose.

With regard to the nativity of those who perform these various operations, the following table shows that foreign men are very well represented in the skilled division of cutting; that they predominate in the sewing division and also in the laundry. This large proportion of men in all branches of the trade is again a reflection of the situation in New York City. As for women, we find the largest proportion of natives in the more skilled lines, while the foreign born are very numerous in sewing and ironing.

TABLE VIII
OCCUPATIONS BY NATIVITY

OCCUPATIONS	MALE		FEMALE	
	Native	Foreign	Native	Foreign
Markers.....	15	27	.....	1
Cutters.....	210	126	1	.....
Trimmers.....	25	22	5	.....
Helpers.....	73	125	37	2
Foremen and forewomen..	73	72	118	30
Operators.....	39	750	3,290	2,956
Floor work.....	26	50	388	382
Laundry helpers.....	35	18	35	24
Starchers and dampeners..	4	4	135	89
Ironers.....	290	694	248	284
Examiners.....	28	9	543	103
Folders.....	16	30	101	140
Packers.....	21	41	118	36

PIECE RATES

Sixty-five per cent of the female employees and 56 per cent of the male employees in shirt factories are on piece rates. It is therefore necessary to have some idea of the basis upon which earnings in the trade are calculated. The following examples are given not to explain exhaustively the scheme of rates, but to show certain typical cases.

These rates are sometimes arrived at by a rough method of experiment. When a new operation is about to be performed, several operators (slow, fast and ordinary) are put to work upon the task and their earnings are averaged and used as a basis for payment on the new work. This, however, applies only to the more carefully organized establishments. In the main, the price of shirts is known and the cost is figured down, so much being assigned to labor. Each operation is then assigned a recompense sufficient to make up the calculated amount.

Making a plain working shirt is ordinarily divided into more than twenty special operations. The "sections", or subdivisions of the work vary from plant to plant according to the specific character and finish of the garment, the kind of machines used and the skill of the operatives.

The following list shows the nature of the work done in sewing and finishing a blue chambray shirt, double stitched throughout, with attached collar and one pocket, sleeve facings and seven pearl buttons. Contractors charge from 65 cents to 85 cents a dozen to make up such garments, which sell for \$3 to \$3.50 per dozen, wholesale, and ordinarily cost the consumer 50 cents each. The figures here given show piece rates and output in New York City shops specializing in this line of goods.

These rates are only two-thirds to three-fourths of the union scale, which fixes 65 cents per dozen for operating on a single stitched shirt without pockets and not including the sewing of buttons. On the low scale given, it will be seen that a skilled worker can make from \$10 to \$15 a week, while an unskilled hand may get only \$2 to \$5. But to turn out 500 to 600 dozen pieces in 54 hours means two garments a minute, which gives some idea of the pace required.

TABLE IX
RATES ON WORK SHIRTS — NEW YORK CITY

OPERATIONS	Typical rates per dozen	WEEKLY OUTPUT PER OPERATOR	
		Superior	Average
<i>Front</i>	<i>Cents</i>		
Stitching center pleat.....	1½-2	680	565
Finishing center and button piece.....	4½	.....	.....
Stitching pocket.....	1-1½	570	524
Setting pocket.....	2½	.....	.....
<i>Back</i>			
Setting yoke.....	1½-2	550	412
Sewing label.....	1	.....	.....
Joining front and back.....	1½	558	434
<i>Collar</i>			
Making and stitching.....	3½-6	183	158
Turning points.....	1	.....	.....
Turning or stitching bands.....	3	.....	.....
Setting collar.....	3-3½	306	228
<i>Sleeve</i>			
Piecing.....	1½-2	480	335
Stitching facing.....	1½	520	484
Finishing facing.....	4½	156	145
Sleeving in.....	3½-4½	250	200
<i>Cuff</i>			
Making.....	1	350	200
Hemming.....	1½	.....	.....
Turning and stitching.....	4	163	97
Setting on sleeve.....	2		
<i>Complete body</i>			
Hemming shirt.....	2½-2½	305	250
Closing side seams.....	3½-4½	250	200
<i>Buttons</i>			
Marking.....	1-3	716	560
Making buttonholes.....	3-3½	335	200
Sewing on buttons.....	2½-2½	412	280
<i>Finishing and packing</i>			
Trimming — cleaning.....	1-1½	400	325
Buttoning.....	1-1½	500	400
Packing.....	1-2	.....	235

Total cost for sewing and completing, 53½ cents.
Average factory output, 60-65 dozen per operator per week.

The rates for sewing negligee shirts are somewhat higher than on work shirts, because of the better grade of work required. The accompanying table shows piece and week rates for the more important sewing operations. These are representative of the run of factories in New York City. Such cotton shirts ordinarily cost about \$1 a dozen to make and sell at \$2.50 to \$5 per dozen, according to quality.

TABLE X
RATES ON NEGLIGEE SHIRTS — NEW YORK CITY

SEWING OPERATIONS	Piece rates per dozen	WEEK RATES	
		Male	Female
	<i>Cents</i>		
Front making.....	12-35	\$11 50-\$15 00	\$5 50- \$8 50
Collar and cuff making..	15-25	11 75- 16 25	4 75- 8 00
Collar setting.....	15-25	8 50- 15 50	5 50- 9 00
Back making.....	.....	6 50- 7 00	5 25- 7 00
Sleeve making.....	8-25	6 25- 14 25	4 75- 7 25
Joining.....	2½-3	7 15- 15 00	6 50- 9 00
Sleeving.....	5-7	13 25- 15 50	6 50-10 25
Closing and Hemming...	3-7	10 50- 15 75	5 50- 9 00
Buttonholing.....	5-6	8 25- 13 00	5 75- 8 50
Button setting.....	.....	7 25- 9 75	5 50- 8 00
Operating (general).....	.....	10 25- 13 75	5 25- 8 50
	<i>Contract price:</i>	<i>Average:</i>	<i>Average:</i>
All sewing.....	75c-\$1 75	\$9-\$15	\$5-\$8 50

The following table shows for typical factories in the Troy districts, representative rates, outputs and hourly earnings for female operators engaged in sewing:

TABLE XI
TYPICAL RATES, HOURLY OUTPUT AND EARNINGS
FEMALE SHIRT OPERATORS — TROY FACTORIES

OPERATION	Typical rates per dozen	Ordinary output per hour	Usual earnings per hour
	<i>Cents</i>	<i>Dozen</i>	<i>Cents</i>
Marking for buttons.....	1 -2½	11 -14	14-26
Sewing on buttons.....	1½-3½	6½-11	17-24
Joining front and back....	4 - 5	2½- 4	13-18
Putting on cuffs.....	8 -11	1½- 2	11-24
Putting on neckbands.....	8 -13	1½- 2½	14-24
Sleeving in.....	5 -10	2½- 4	16-22
Felling (closing sides).....	5 - 8	2 - 4	16-22
Hemming.....	3 -12	2 - 4	13-22
Principal sewing operations.....	.....	2 - 5	15-24

Hand starching, which is mostly women's work, is usually paid at the rate of 5 cents or 10 cents per dozen shirts according to the amount of surface stiffened. If only the neckband is to be starched, less is paid. If an elaborate bosom is to be stiffened, more than the amounts quoted is given.

Hand ironing is ordinarily paid at the rate of 4 cents to 10 cents per garment according to the amount of starched surface to be smoothed. An average male ironer will turn out two or three garments an hour and on the better grade of work will ordinarily earn from 20 cents to 30 cents per hour.

The highest and lowest skilled work is ordinarily paid upon a time basis although even cutting and packing are occasionally at piece rates based on the usual or expected output per employee.

It will be noted at once that rates in general are higher in Troy than in New York City. This is due to several reasons: First, the class of goods manufactured up-state is of finer quality as a whole. Secondly, the class of labor is somewhat different, being composed in the main of native stock with certain well established standards of living.

It is true also, that rates for the same operations are lower in small towns than in Troy. This is true in factories of the same concern and is probably due to the reasons above given. The employers themselves admit that they have located some of these outlying factories because labor is cheaper in small places and there is less danger of strikes. In some cases these small factories were the property of sub-contractors and were taken over by the larger concerns in order to have complete control.

In some of the factories, where finer grades of goods are made, we find that there is a guarantee of a minimum amount per week for the more skilled operatives. This is in order to prevent their leaving the employ of the firm by assuring them a certain amount of work throughout the year.

WEEK RATES

We secured weekly rates for over 4,000 persons classified according to occupation. The following table shows the distribution of these according to wage groups. (See Table XII, pp. 190-1.)

To summarize these figures, we may say that most markers range from \$16 to \$25 and cutters from \$11 to \$18. The majority of trimmers vary from \$8 to \$14. Practically all of the persons in these three occupations are males. Both boys and girls act as helpers in the cutting department, the young men usually receiving from \$5 to \$9 per week, and the girls from \$4.50 to \$7.

Foremen and forewomen are perhaps the best paid as a class. The men usually receive from \$15 to \$25 a week, and women in this capacity get from \$9 to \$12. The great mass of operators are women, of whom more than half receive between \$5 and \$9 a week. Men ordinarily get from \$8 to \$15. For the rougher kind of floor work, \$4 to \$7 is the usual range.

In the laundry, the majority of male helpers get from \$7 to \$12 and women, from \$5 to \$8. Most of the ironers are on piece rates, but those men who are paid by the week usually range from \$7 to \$10 and women, from \$6 to \$8.

The majority of male examiners range from \$7 to \$15, while most women get from \$5 to \$8 for similar work, and about the same for packing. Folders are the lowest paid, the majority of girls ranging from \$3 to \$6 a week, while the few young men engaged, ordinarily run from \$6 to \$11.

To sum up the whole matter, over one-half of the male employees in shirt factories in this State where weekly rates are quoted, are paid less than \$12 a week, and one-half of all the women and girls receive less than \$6.50.

TABLE XII
SPECIFIED RATES BY OCCUPATION, FOR EACH SEX

WEEKLY RATES	OCCUPATION												WEEKLY RATES				
	MARKERS		CUTTERS		TRIMMERS		CUTTERS' HELPERS		FOREMEN OR FOREWOMEN		OPERATORS		FLOOR WORK		LAUNDRY HELPERS		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.....	....	....	....	....	....	....	....	....	....	....	1	3	....	1	....	....	..Less than \$3 00
\$3 00-\$3 49.....	....	....	....	2	....	....	....	2	....	....	2	35	4	52	....	....	.....\$3 00- 3 49
3 50- 3 99.....	....	....	....	....	....	....	4	....	....	....	1	59	5	56	....	....	.....3 50- 3 99
4 00- 4 49.....	....	....	....	....	....	....	10	3	....	....	7	106	7	84	1	1	.....4 00- 4 49
4 50- 4 99.....	....	....	....	....	....	....	8	8	....	1	3	89	3	48	2	2	.....4 50- 4 99
5 00- 5 49.....	....	....	....	....	....	....	....	....	....	....	6	131	5	77	3	7	.....5 00- 5 49
5 50- 5 99.....	....	....	....	....	....	....	....	....	....	....	1	96	3	34	1	4	.....5 50- 5 99
6 00- 6 49.....	....	....	....	....	....	....	....	....	....	....	8	159	6	66	2	6	.....6 00- 6 49
6 50- 6 99.....	....	....	....	....	....	....	....	....	....	....	3	82	2	21	....	3	.....6 50- 6 99
7 00- 7 49.....	....	....	....	....	....	....	....	....	....	....	9	113	7	31	1	4	.....7 00- 7 49
7 50- 7 99.....	....	....	....	....	....	....	....	....	....	....	5	92	1	10	2	2	.....7 50- 7 99
8 00- 8 99.....	....	....	....	....	....	....	....	....	....	....	17	191	2	17	2	3	.....8 00- 8 99
9 00- 9 99.....	2	....	....	....	....	....	....	....	....	....	10	154	2	11	8	1	.....9 00- 9 99
10 00-10 99.....	1	....	....	....	....	....	....	....	....	....	14	70	....	3	7	4	.....10 00-10 99
11 00-11 99.....	1	....	....	....	....	....	....	....	....	....	19	24	....	....	2	2	.....11 00-11 99
12 00-12 99.....	....	....	....	....	....	....	....	....	....	....	40	20	....	....	4	....	.....12 00-12 99
13 00-13 99.....	1	....	....	....	....	....	....	....	....	....	27	6	....	2	3	2	.....13 00-13 99
14 00-14 99.....	2	1	....	....	....	....	....	....	....	....	17	1	....	....	....	....	.....14 00-14 99
15 00-15 99.....	1	....	....	....	....	....	....	....	....	....	26	....	2	....	2	....	.....15 00-15 99
16 00-17 99.....	3	....	....	....	....	....	....	....	....	....	15	....	1	....	....	....	.....16 00-17 99
18 00-19 99.....	4	....	....	....	....	....	....	....	....	....	6	....	....	....	4	....	.....18 00-19 99
20 00-24 99.....	23	....	....	....	....	....	....	....	....	....	2	....	....	....	1	....	.....20 00-24 99
25 00-29 99.....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	.....25 00-29 99
30 00-34 99.....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....30 00-34 99
35 00-39 99.....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....35 00-39 99
40 00 and over.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	...40 00 and over
Total.....	41	1	262	48	1	1	193	30	144	144	240	1,431	51	513	46	41	.....Total

TABLE XII
Specified Rates by Occupation, for Each Sex -- (concluded)

WEEKLY RATES	OCCUPATION												WEEKLY RATES	
	STARCHERS AND DAMPENERS		IRONERS AND PRESSERS		EXAMINERS		FOLDERS		PACKERS		TOTAL			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
Less than \$3 00..	....	....	....	....	....	....	....	2	....	....	1	6	Less than \$3 00
\$3 00-\$3 49.....	....	....	....	....	....	4	....	13	....	....	6	107	...\$3 00- 3 49
3 50- 3 99.....	....	....	....	....	....	5	....	4	....	....	10	130	....3 50- 3 99
4 00- 4 49.....	1	4	....	....	....	29	....	9	....	14	27	253	....4 00- 4 49
4 50- 4 99.....	1	....	....	....	....	22	....	3	....	10	18	184	....4 50- 4 99
5 00- 5 49.....	....	3	....	....	....	5	2	3	....	36	63	304	....5 00- 5 49
5 50- 5 99.....	....	4	....	....	....	5	1	2	....	10	24	189	....5 50- 5 99
6 00- 6 49.....	1	....	....	....	....	17	3	4	....	12	76	388	....6 00- 6 49
6 50- 6 99.....	....	3	....	....	....	4	1	3	....	7	21	149	....6 50- 6 99
7 00- 7 49.....	....	8	....	....	....	10	2	3	....	13	78	270	....7 00- 7 49
7 50- 7 99.....	....	3	....	....	....	8	....	1	....	2	25	131	....7 50- 7 99
8 00- 8 99.....	1	2	....	....	....	10	2	....	....	6	112	293	....8 00- 8 99
9 00- 9 99.....	....	....	....	....	....	5	1	....	....	10	83	256	....9 00- 9 99
10 00-10 99.....	1	....	....	....	....	19	3	1	....	3	63	119	....10 00-10 99
11 00-11 99.....	1	....	....	....	....	4	2	....	....	....	55	39	....11 00-11 99
12 00-12 99.....	....	1	....	....	....	11	....	1	....	....	82	53	....12 00-12 99
13 00-13 99.....	....	....	....	....	....	1	2	....	....	....	70	17	....13 00-13 99
14 00-14 99.....	....	....	....	....	....	....	1	....	....	1	57	8	....14 00-14 99
15 00-15 99.....	....	....	....	....	....	....	....	....	....	....	88	11	....15 00-15 99
16 00-17 99.....	....	....	....	....	....	....	....	....	....	....	80	4	....16 00-17 99
18 00-19 99.....	....	....	....	....	....	....	....	....	....	....	67	4	....18 00-19 99
20 00-24 99.....	....	....	....	....	....	....	....	....	....	....	72	3	....20 00-24 99
25 00-29 99.....	....	....	....	....	....	....	....	....	....	....	25	....	....25 00-29 99
30 00-34 99.....	....	....	....	....	....	....	....	....	....	....	12	....	....30 00-34 99
35 00-39 99.....	....	....	....	....	....	....	....	....	....	....	3	....	....35 00-39 99
40 00 and over...	....	....	....	....	....	....	....	....	....	....	3	....	....40 00 and over
Total.....	6	37	83	70	36	469	21	50	50	131	1,221	2,918	.....Total

ACTUAL WEEKLY EARNINGS

As we have seen, most of the semi-skilled operatives of both sexes are on a piece rate basis. It is therefore impossible to estimate their ordinary income without discovering the amounts in their pay envelopes for a typical week. This we did by copying from the books the sums credited to all employees in the New York City factories for a week in December and January last, and for the establishments up-state during a week in May or June. Winter is ordinarily a busy season in the New York City shops, while in late spring, the majority of up-state factories usually begin to slacken their work. It should be noted, however, that last year, business was slow throughout the State, and several large manufacturers about Troy assured us that their season had been unusually dull. Three establishments in that vicinity were in financial difficulties, and the factories were running on reduced time. With this understanding of the general situation, we present the following table showing for the main occupations the number of persons of each sex who actually received given amounts for a week's work. Although these amounts are probably not the maximum, neither are they minimum payments, and so may be regarded as fair representative data. (See Table XIII, pp. 194-5.)

At first glance this table appears very like the preceding one on weekly rates. A brief examination shows, however, that nearly three times as many persons are included, the earnings of piece workers being here entered. The numbers earning both high and low amounts are, therefore, much larger. But the proportions of all those recorded in each table under given amounts vary. For instance, the middle 50 per cent of male operators are quoted at rates between \$8 and \$15, but most of those for whom weekly earnings are given, range from \$7 to \$14, or a dollar less. On the other hand, representative rates for men ironers vary from \$7 to \$10 a week, but actual earnings for that occupation center between \$7 and \$14—a decided increase. For women laundry helpers, starchers and folders, the amounts received by the middle 50 per cent range from \$2 to \$4 above the usual rates quoted.

Such variations alter the percentage of all who receive more or less than given amounts, as compared with those given for rates. For example, only 20 per cent of male employees for whom weekly rates are quoted were entered at less than \$7; but more than 24 per cent for whom earnings are given actually got less during the week in question. Twenty-nine per cent might have been expected to get \$15 or more, but only 22½ per cent actually received so much. In the case of women and girls, 8 per cent were entered at rates under \$4, but 14 per cent of all received less for a week's work. On the other hand, according to the previous table, only 8 per cent of the women might have been expected to earn \$10 or over; whereas 16 per cent actually received these higher wages. This is of course due to the fact that most skilled operatives are on a piece basis, and no time rates are quoted. The following graph, for New York City factories only, shows how the lines for earnings are above those for rates at both ends of the curves for each sex. (See Plate A, p. 196.)

In a trade where piece rates prevail, actual earnings furnish the only available standard for estimating the income of employees. According to the receipts for the weeks in question, more than half of the male employees in shirt factories throughout the State, get less than \$11 for a week's work, and more than half the women and girls fall below \$7. Nearly two-thirds of the female employees receive less than \$8 and more than one-fourth less than \$5. We here present a graph (Plate B) which shows at a glance the proportion of all men and women who received wages classified by \$5 groups. (See p. 197.)

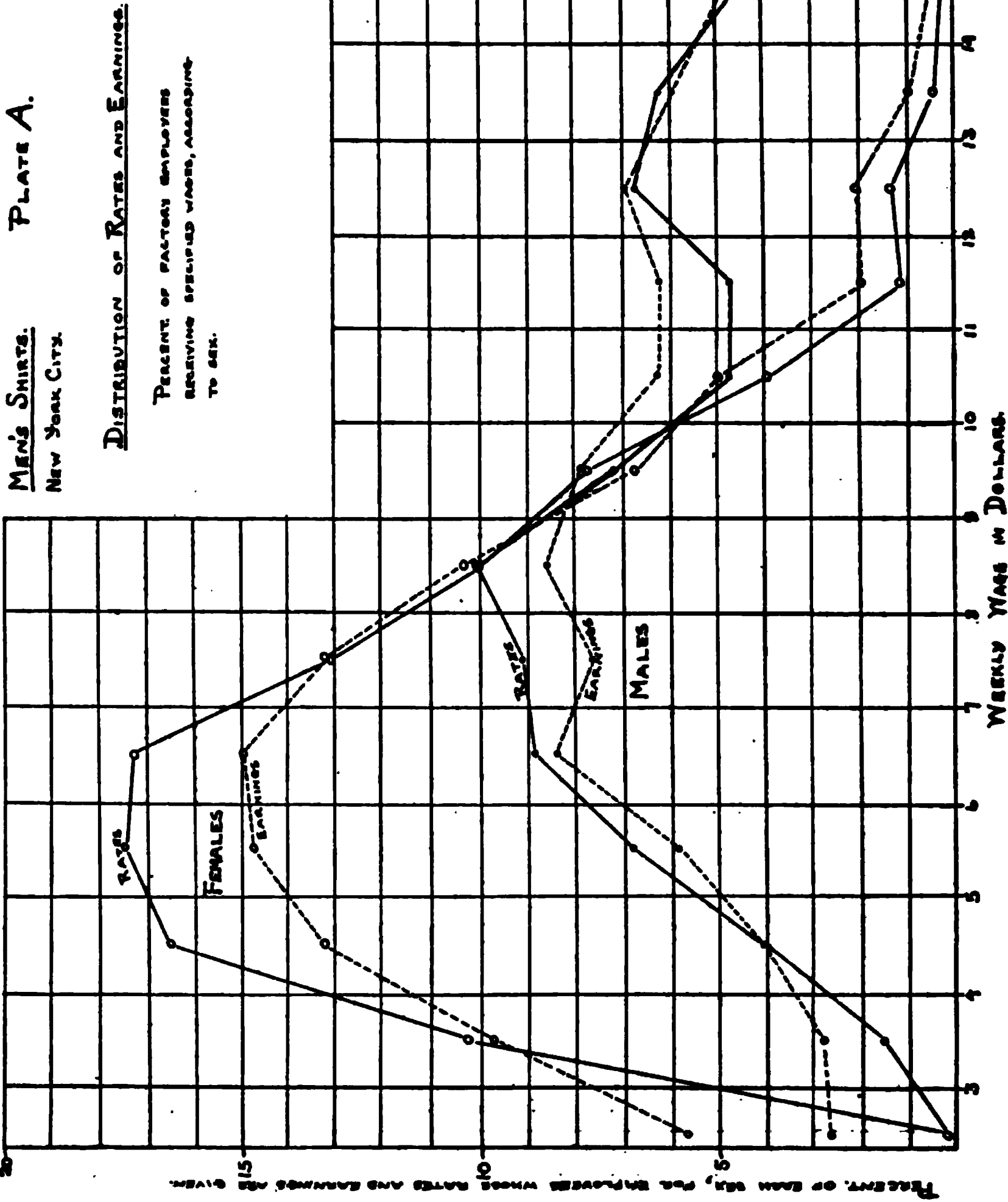
TABLE XIII
WEEKLY EARNINGS BY OCCUPATION, FOR EACH SEX

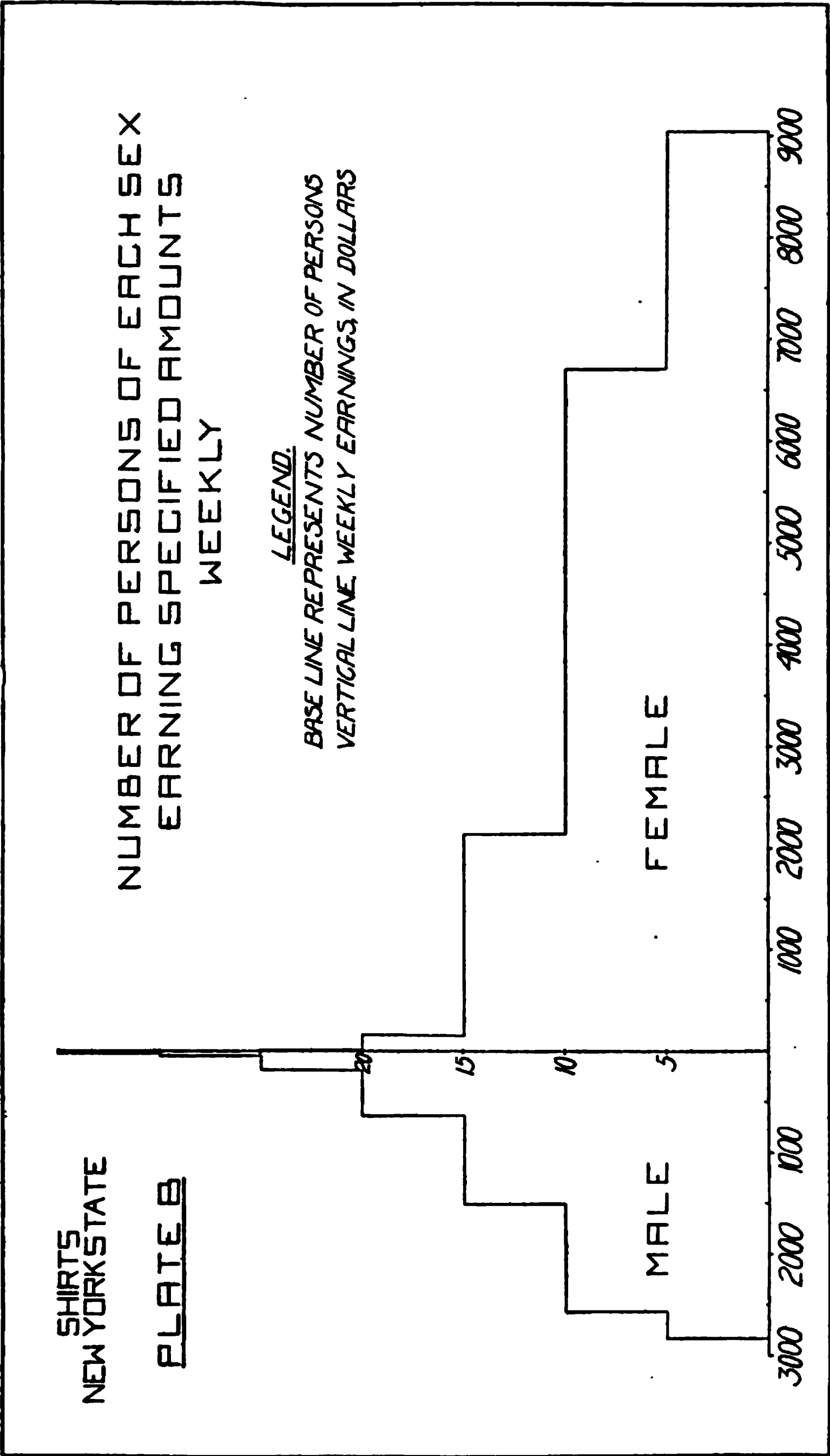
WEEKLY EARNINGS	OCCUPATION												WEEKLY EARNINGS				
	Markers		Cutters		Trimmers		Cutters' helpers		Foremen or Forewomen		Operators		Floor work		Laundry helpers		
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	
Less than \$3 00..	....	....	4	....	....	....	6	1	....	1	30	370	4	85	....	3	Less than \$3 00
\$3 00- 3 49.....	....	....	2	1	....	....	3	3	....	2	11	227	6	79	....	....	....3 00- 3 49
3 50- 3 99.....	....	....	....	....	....	....	6	....	....	1	12	236	5	78	....	1	....3 50- 3 99
4 00- 4 49.....	....	....	....	....	....	1	9	4	....	....	15	323	8	102	....	1	....4 00- 4 49
4 50- 4 99.....	....	....	2	....	....	....	12	6	....	1	11	352	1	65	....	5	....4 50- 4 99
5 00- 5 49.....	....	....	7	....	1	....	24	1	....	1	23	443	5	96	....	5	....5 00- 5 49
5 50- 5 99.....	....	....	3	....	....	....	13	5	....	2	17	389	4	50	....	7	....5 50- 5 99
6 00- 6 49.....	....	....	8	....	3	....	21	4	....	5	35	476	13	61	....	8	....6 00- 6 49
6 50- 6 99.....	....	....	2	....	1	....	16	2	....	4	22	362	3	31	....	2	....6 50- 6 99
7 00- 7 49.....	....	....	4	....	....	....	16	3	....	6	31	455	10	31	....	4	....7 00- 7 49
7 50- 7 99.....	....	....	....	....	2	....	13	4	....	8	22	348	1	18	....	5	....7 50- 7 99
8 00- 8 99.....	....	....	18	....	6	....	33	2	....	17	60	703	5	31	....	1	....8 00- 8 99
9 00- 9 99.....	1	....	17	....	....	1	15	3	....	25	61	482	4	21	....	3	....9 00- 9 99
10 00-10 99.....	1	....	22	....	3	....	7	1	....	14	60	392	....	9	....	10	....10 00-10 99
11 00-11 99.....	....	....	23	....	7	....	2	....	....	10	65	198	....	3	....	3	....11 00-11 99
12 00-12 99.....	1	....	27	....	3	....	2	....	....	18	75	176	....	2	....	....	....12 00-12 99
13 00-13 99.....	1	....	29	....	5	....	1	....	....	6	49	103	2	1	....	1	....13 00-13 99
14 00-14 99.....	3	1	22	....	4	....	....	....	....	5	48	76	1	1	....	1	....14 00-14 99
15 00-15 99.....	....	....	24	....	3	....	....	....	....	11	41	34	3	....	....	....	....15 00-15 99
16 00-17 99.....	4	....	30	....	1	....	....	....	....	4	53	38	1	....	....	....	....16 00-17 99
18 00-19 99.....	5	....	38	....	....	....	....	....	....	4	24	15	....	....	....	....	....18 00-19 99
20 00-24 99.....	22	....	33	....	....	....	....	....	....	4	18	4	....	....	....	....	....20 00-24 99
25 00-29 99.....	2	....	6	....	....	....	....	....	....	....	3	1	....	....	....	....	....25 00-29 99
30 00-34 99.....	1	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....30 00-34 99
35 00-39 99.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....35 00-39 99
40 00 and over...	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....40 00 and over
Total.....	42	1	339	1	48	5	199	39	146	149	786	6,203	76	764	53	60	Total.....

TABLE XIII

WHEELT EARNINGS BY OCCUPATION, FOR EACH SEX (continued)

Less than \$3.00 \$3.00-3.49 3.50-3.99 4.00-4.49 4.50-4.99 5.00-5.49 5.50-5.99 6.00-6.49 6.50-6.99 7.00-7.49 7.50-7.99 8.00-8.49 8.50-8.99 9.00-9.49 10.00-10.49 11.00-11.49 12.00-12.49 13.00-13.49 14.00-14.49 15.00-15.49 16.00-16.49 18.00-18.49 20.00-20.49 25.00-25.49 30.00-30.49 35.00-35.49 40.00 and over	Age and sex	Occupation										Total	
		Examiners		Folgers		Pressers		T		Percentage	Number		
		Male	Female	Male	Female	Male	Female	Male	Female				
21	17	12	13	4	7	587	2.2	5.9	Less than \$3.00				
6	7	10	20	5	5	260	3.2	9.9	3.00-3.49				
8	27	9	13	8	8	230	5.2	14.1	3.50-3.99				
5	18	16	16	3	19	623	7.4	19.9	4.00-4.49				
5	19	20	12	3	20	531	9.4	25.8	4.50-4.99				
10	44	27	11	5	27	706	13.6	33.6	5.00-5.49				
19	19	33	24	4	8	591	15.9	40.2	5.50-5.99				
13	48	40	14	11	14	725	21.3	48.2	6.00-6.49				
8	30	37	13	3	8	511	24.2	53.8	6.50-6.99				
25	52	28	16	3	13	644	27.9	61.	7.00-7.49				
25	26	35	9	2	2	485	31.3	66.3	7.50-7.99				
1	114	58	15	12	9	904	40.5	78.3	8.00-8.49				
13	62	37	13	6	7	652	47.7	83.6	8.50-8.99				
10	63	43	8	2	5	510	52.9	89.2	9.00-9.49				
14	63	39	7	1	1	263	59.	92.3	10.00-10.49				
2	77	37	7	1	1	254	66.	95.1	11.00-11.49				
4	73	38	5	2	1	163	73.	96.9	12.00-12.49				
4	61	9	11	2	1	110	77.5	98.2	13.00-13.49				
16	45	4	13	2	1	80	82.3	99.1	14.00-14.49				
2	71	1	4	1	1	51	88.7	99.7	15.00-15.49				
38	38	1	1	1	1	21	93.6	99.9	16.00-16.49				
24	24	1	1	1	1	8	98.2	100.	18.00-18.49				
1	1	1	1	1	1	1	99.2	100.	20.00-20.49				
1	1	1	1	1	1	1	99.8	100.	25.00-25.49				
1	1	1	1	1	1	1	99.9	100.	30.00-30.49				
1	1	1	1	1	1	1	99.9	100.	35.00-35.49				
1	1	1	1	1	1	1	100.	100.	40.00 and over				
Total	8	533	245	62	154	9,028	100.	100.	Total				





The following table shows typical outputs and earnings for some more important sewing trades:

TABLE XIV
TYPICAL WEEKLY OUTPUT AND EARNINGS FOR REPRESENTATIVE SEWING OPERATIONS BY FEMALE EMPLOYEES IN TROY FACTORIES

OPERATIONS	Most usual output	Representative earnings
	<i>Dozen</i>	
Buttonholing.....	100-200	\$8-\$10
Bosom banding.....	50-100	7- 8
Sleeve facing.....	150-200	8- 11
Cuff attaching.....	60-100	6- 11
Neckband attaching.....	50-100	6- 11
Joining front and back.....	150-200	6- 9
Sleeving in.....	150-200	8- 11
Felling side seams.....	100-150	5- 10
Hemming skirt.....	90-150	5- 10

In certain of these lines we find outputs half the minimum and twice the maximum, here quoted. The number of dozens here given, however, and the wages to the workers in these special lines show what is to be expected in a well organized factory.

Judging from the returns of one representative plant, we should say that the earnings of a female operator during a busy season will average about 18 cents an hour. This makes it possible for a steady operator working full time, to make as much as \$12 a week; but this amount is not regularly attained by sewing women. They work less than the maximum hours and earn ordinarily between \$8 and \$9 in the better factories. One reason for loss is the impossibility of always getting work. The amount to be done depends upon the orders that have come in, or the speed of operators who manipulate the goods before they come to those who do the latter sewing operations.

In a few plants in Troy, we find that rent is charged for the sewing machines, although they are practically all the property of the employers. This is a relic of the time when the women owned their foot-power machines and brought them to be located in the factory. We also find in some cases that the thread used is charged for. This it is said reduces waste and prevents operators from carrying off odd spools. At the same time it

must be said that in most of the factories this usage no longer prevails. The same thing holds with regard to needles. In order to insure care in some places, needles are charged for. In one place we find that a small sum is deducted from the wages of operatives for the ice water which is furnished them in the workroom. This is, of course, an exceptional case, but serves to illustrate the fact that one cannot always gauge the earnings of a worker even when knowing how many pieces were turned out and at what rate these are paid.

WAGE AND AGE

Earnings, of course, depend partly upon the maturity and experience of the worker. There is no regular apprenticeship in the shirt trade, unless it be in cutting. There, a person must work for several years until he is competent to lay out and cut a pattern. The ordinary operatives are able to do the sewing and laundry work after a short term of practice.

We have seen that most of the operatives, especially the women, are young. The following table shows how rates and earnings are correlated with age groups. This table shows the main tendency only. For the complete distribution of each age period, we refer the reader to Tables Nos. 91 and 93 in the statistical appendix.

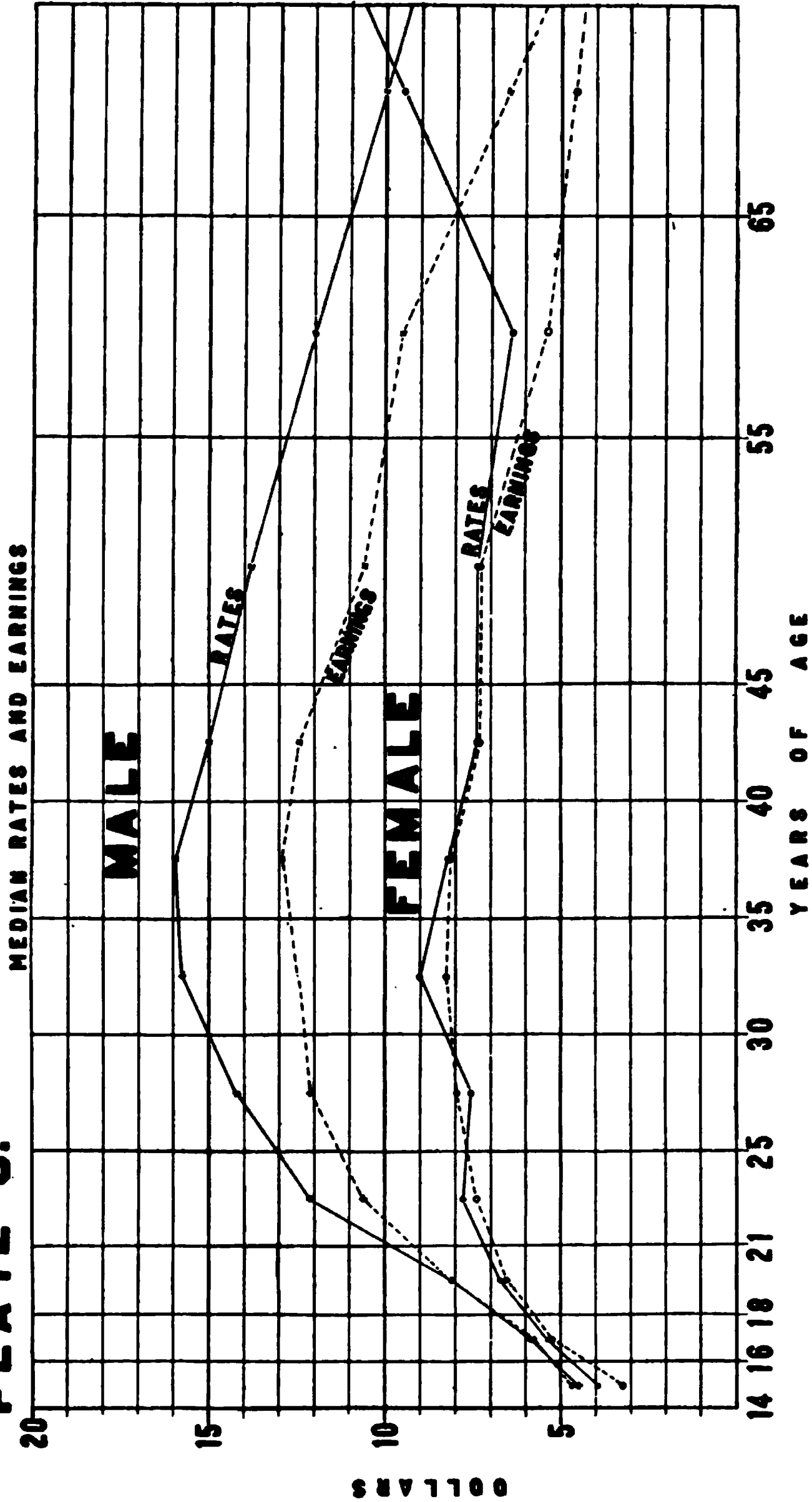
TABLE XV
MEDIAN RATES AND EARNINGS BY AGE AND SEX

AGE	MALE				FEMALE			
	Number	Cumulative per cent	Median rate	Median earnings	Number	Cumulative per cent	Median rate	Median earnings
14-15.....	28	1.	\$4 58	\$4 67	174	1.9	\$3 97	\$3 24
16-17.....	180	7.4	5 89	5 79	1,447	18.4	5 36	5 21
18-20.....	412	22.	8 07	8 08	2,654	47.8	6 73	6 58
21-24.....	468	38.5	12 10	10 62	1,729	66.6	7 78	7 37
25-29.....	512	56.7	14 19	12 08	1,007	77.8	7 58	7 95
30-34.....	371	69.8	15 82	12 51	593	84.4	9 00	8 25
35-39.....	349	82.2	15 95	12 95	546	90.8	8 17	8 19
40-44.....	228	90.3	15 00	12 39	312	94.3	7 37	7 35
45-54.....	219	98.1	13 80	10 64	323	97.9	7 36	6 90
55-64.....	48	99.8	12 00	9 50	82	98.8	6 44	5 41
65+.....	8	100.	10 00	6 50	17	100.	9 50	4 62
All ages.....	2,823	100.	\$11 10	\$10 54	8,984	100.	\$6 48	\$6 72

It is clear from the table and from the accompanying chart (Plate C) which shows the same facts graphically, that one-half the men never rise to a \$16 rate and that their actual earnings in the prime of life do not touch \$13. For women, of course, the amounts are less. The highest regular rate achieved by half the women between 30 and 35 years of age is \$9, while the highest earning for the majority is \$8.25. In general, the earnings are lower than the rates, although the large number of skilled operatives for whom no rates are quoted, bring the general level up somewhat. But, as we have already seen, neither rates nor earnings touch \$7, so far as the majority of all female employees are concerned.

The extreme cases are, of course, not shown in this general table. We find on referring to the detailed table, that 248 adult men, that is, 11 per cent of all the males 21 years and over, received less than \$6 for the week when their shop was investigated, and 2,394 women over 18 years of age, that is, nearly one-third of all the females 18 years and over, received less than \$6. Whatever the conditions of the trade may be, it is obvious that a very large proportion of the workers do, at one time or another, receive less than is usually considered sufficient to maintain persons independently.

SHIRTS
NEW YORK STATE
WAGE AND AGE
PLATE C.



EXPERIENCE

The following table shows for each sex by age periods the mean number of years worked for wages, as well as length of time in the shirt business and with the firm where recorded. The figures give us a picture of the representative male employee as a man of 28 years, who has been a wage earner $10\frac{1}{2}$ years, of which time over half (5 years, 8 months) has been spent in the shirt trade, but only a trifle over 2 years with the last firm. The typical woman is just past 21, having worked nearly $4\frac{1}{2}$ years, of which time half has been in the shirt trade, but less than two with the firm. The table shows interesting variations, especially in the higher age groups, where some have stayed on for years but others have drifted into the business late in life. The latter tendency is especially true of immigrants. Twenty years seems to be the ordinary limit of time in the trade, and eleven years the longest term with the firm. We have one case of a woman who has been in one establishment over 45 years.

TABLE XVI
AGE AND EXPERIENCE BY SEX

Age	AT WORK				IN TRADE				WITH FIRM			
	Male		Female		Male		Female		Male		Female	
	Years	Months	Years	Months	Years	Months	Years	Months	Years	Months	Years	Months
14-15.....	1	.....	.....	9½	.....	8	.....	8	.....	8	.....	7½
16-17.....	1	11½	1	10	.....	11½	1	2½	.....	9	.....	10
18-20.....	2	8	3	5½	2	1½	2	3½	1	1½	1	6½
21-24.....	6	8	7	1½	4	2½	4	3½	1	9½	2	11½
25-29.....	11	2½	10	4½	6	10	6	6½	2	5	4	1½
30-34.....	16	1½	13	11½	8	2½	8	8½	3	4½	2	1½
35-39.....	20	5½	17	4½	12	3½	10	9½	4	3½	5	7½
40-44.....	25	2	18	4½	15	4½	13	4½	4	1½	6	½
45-54.....	31	1½	22	10½	16	9½	14	2½	3	10½	6	4½
55-64.....	39	.....	22	2½	15	10	14	9½	3	3	3	2
65+.....	45	.....	30	.....	10	.....	20	.....	4	6	11	3
Medians.....	10	6½	4	5½	5	8	2	10½	2	1½	1	11

It is interesting to note from the personal interviews held with employees that out of 311 women and girls who answered regarding length of service, 180 (58 per cent) had worked in the shirt trade only; 94 (30 per cent) had tried their hands at two; while 5 within a few years had drifted into four or five lines.

The following tables show the relation between experience and earning. From Table XVII, it appears that over one-eighth of the males had been in the shirt trade for less than a year; that one-half had been engaged in such work less than six years; and that less than one-sixth had been in this business over fifteen years. With regard to females, over 2,000 had been in the trade for less than a year; over one-half, less than three years, and only 7 per cent had been in the trade fifteen years or more.

TABLE XVII
WEEKLY EARNINGS AND TRADE EXPERIENCE

YEARS IN TRADE	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	383	13.7	\$6 04	2,032	22.8	\$4 91
1.....	259	22.9	8 10	1,370	38.3	5 95
2.....	233	31.2	8 76	1,166	51.5	6 64
3.....	184	37.7	10 45	787	60.4	7 32
4.....	203	45.	11 02	730	68.6	7 56
5.....	208	52.4	10 52	494	74.2	8 13
6.....	117	56.6	12 34	336	78.	8 18
7.....	146	61.8	12 71	286	81.2	8 17
8.....	143	66.9	12 72	273	84.3	8 57
9.....	103	70.6	13 28	136	85.8	8 84
10-14.....	370	83.8	13 12	619	92.8	8 57
15-19.....	221	91.7	14 79	318	96.4	8 81
20-24.....	156	97.2	13 73	194	98.6	8 32
25-29.....	48	98.9	14 00	82	99.3	7 62
30-34.....	17	99.5	15 83	43	99.8	6 87
35-44.....	17	100.	18 50	20	99.9	8 50
45+.....	.....	.....	.....	1	100.	13 50
Total.....	2,808	100.	\$10 53	8,887	100.	\$6 63

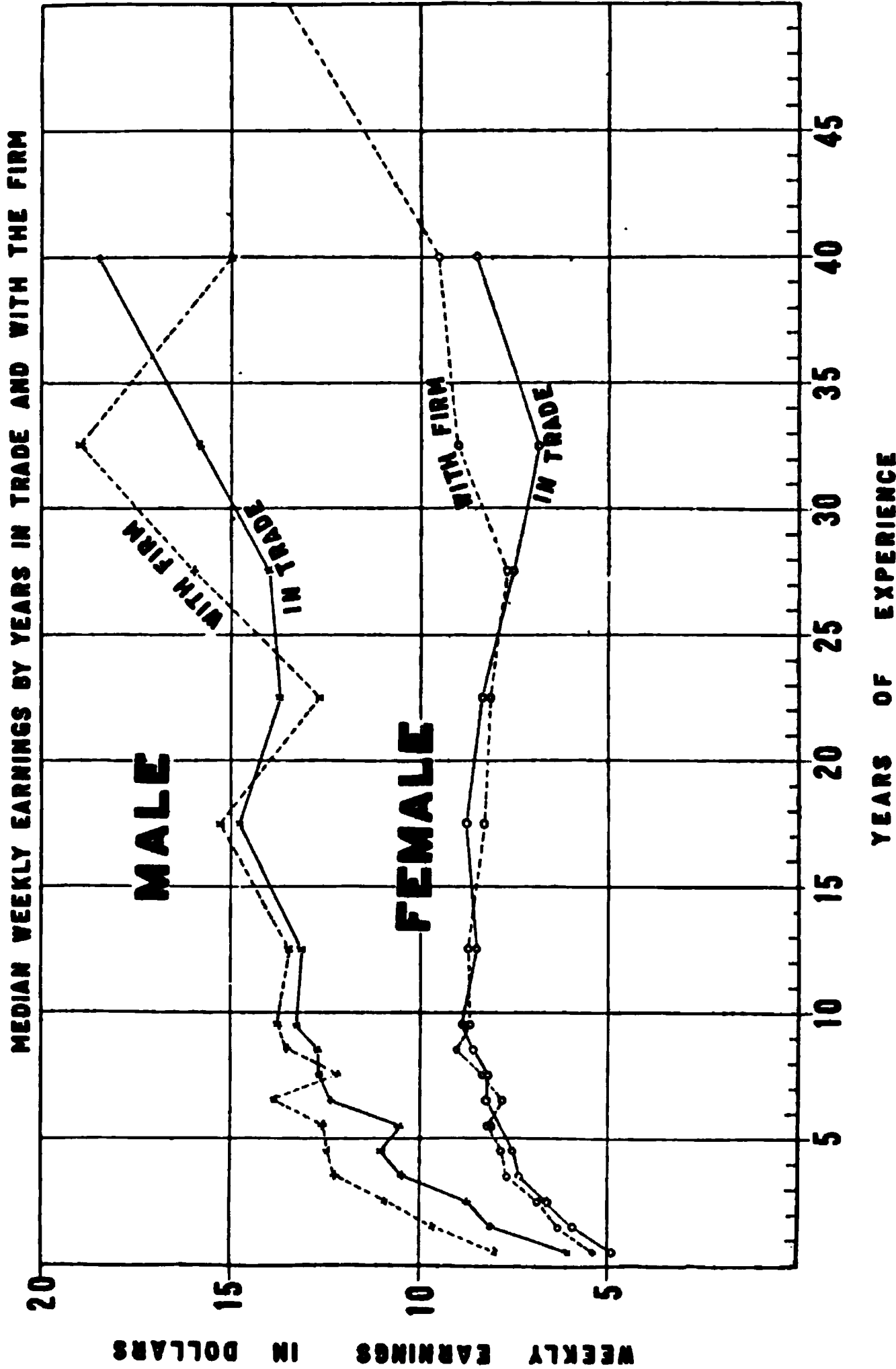
The term of employment with firm is naturally briefer than that in the trade, as shown by Table XVIII. Approximately one-third of all employees had been in the establishment where they were registered for less than a year, and one-half for less than two years, while less than 10 per cent had been employed for ten years.

TABLE XVIII
WEEKLY EARNINGS AND TERM OF EMPLOYMENT

YEARS WITH FIRM	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	920	32.2	\$7 97	3,126	34.7	\$5 38
1.....	455	48.9	9 65	1,571	52.1	6 32
2.....	292	59.3	10 88	990	63.2	6 92
3.....	220	67.1	12 24	705	71.	7 71
4.....	185	73.7	12 42	620	77.9	7 85
5.....	176	80.	12 56	429	82.7	8 19
6.....	102	83.6	13 89	253	85.5	7 80
7.....	99	87.1	12 12	268	88.5	8 31
8.....	77	89.9	13 50	192	90.6	9 00
9.....	44	91.5	13 80	99	91.7	8 68
10-14.....	158	97.1	13 45	392	96.1	8 71
15-19.....	56	99.1	15 33	175	98.	8 31
20-24.....	18	99.7	12 67	103	99.1	8 12
25-29.....	10	99.9	16 00	46	99.6	7 75
30-34.....	2	99.9	19 00	14	99.8	9 00
35-44.....	2	100.	15 00	6	99.9	9 50
45+.....	.....	.....	.....	1	100.	13 50
Total.....	2,816	100.	\$10 53	8,990	100.	\$6 69

The length of experience counts in earnings, as the columns in the preceding table show. In this respect, training in the trade is more valuable than mere maturity of age, as is seen by comparing the preceding table with Table XV. Sticking with the firm pays better than drifting from one factory to another, especially for older hands. At the same time it must be remembered that those who stay or are retained are naturally the better operatives, and so we should expect them to be able to earn more. This experience seems to be worth less than \$1 a year advancement for the first ten years, and then proceeds even more slowly. Over half the men in the trade fail to rise to \$15 a week and only those who stay with the same firm for fifteen years attain this level. Women rise less rapidly than the men. The majority of female employees get \$8 or over after five years of work, but after ten or fifteen years in the business, they begin to decline and drop to \$7 or less, except the few old retainers who have risen to better paying positions. (See Plate D.)

SHIRTS
NEW YORK STATE
PLATE D.
EXPERIENCE AND EARNINGS



Out of 86 female workers up-state, 31 had been with one firm only, 43 had been with two, and the other 12 had worked with three or four.

As to various lines in the trade, we have returns for 310 women and girls both up-state and in New York City. One hundred and ninety-five (63 per cent) had done only one kind of work; 83 (27 per cent) had been engaged in two kinds; and the rest had tried their hand at several. Fourteen women said they had done about all the sewing operations. These figures serve to give some idea of the degree of specialization in the trade.

It may strike the careful reader that the conclusions drawn above are vitiated by the fact that all sorts of workers are included. We have, therefore, made a study of 1,000 female operators, selected according to the relative weight of their age groups in the different localities, and also 229 male cutters, practically all in this occupation found in the State.

TABLE XIX
EXPERIENCE AND EARNINGS IN SPECIFIED OCCUPATIONS

YEARS IN TRADE	1,000 FEMALE OPERATORS		229 MALE CUTTERS	
	Number	Median earnings	Number	Median earnings
Less than 1.....	186	\$5 10	.....	.....
1.....	164	5 96	7	\$8 75
2.....	143	7 28	18	9 00
3.....	89	7 41	7	9 75
4.....	84	8 15	12	11 67
5.....	64	8 50	18	10 50
6.....	40	7 83	8	15 50
7.....	42	7 30	14	13 50
8.....	24	7 20	25	13 62
9.....	12	7 75	6	15 67
10-14.....	76	8 00	60	15 50
15-19.....	31	8 25	25	18 30
20-24.....	25	5 87	12	15 50
25-29.....	10	5 75	9	16 50
30-34.....	5	8 50	4	14 00
35-44.....	4	6 75	4	19 00
45+.....	1	13 50	.....	.....
Total.....	1,000	\$6 76	229	\$14 29

Table XIX shows that the earnings of sewing women increase for the first six years and then drop off. Medians for five year periods, however, show some advancement up to twenty years, but a moving average or a smooth curve shows a gradual decline

in the later years. Those cases of thirty years of experience or more are too few to have much statistical weight. Of the twelve women who earned \$15 or over, none had worked at the trade for as long as fifteen years, and one of them had been at the work for less than a year. Two who earned \$18 had worked two and six years respectively.

The character of these returns leads us to believe that the majority of female operatives attain their maximum earning capacity within comparatively few years. Youth and dexterity are assets. Only the more able or necessitous stay on. These pull up earnings for later years, but there is a steady decline after the first ten years of work.

The returns for the cutters show that earnings increase steadily up to \$15 and \$18 after 10 or 20 years' experience. Then they fall off rapidly. Again the few cases of men at work over 35 years are not numerous enough to establish any well marked tendency. We found a dozen men of ten years' experience or more, earning weekly wages of less than \$10, doubtless because of the state of the trade. But such vicissitudes must be reckoned with in estimating the average returns of workers.

DAYS WORKED

The time worked establishes the pay for both piece and week workers. It is, therefore, essential to know the number of days during which employees were engaged. Table XX shows the facts for 6,900 persons throughout the State.

TABLE XX
DAYS WORKED IN ONE WEEK

	Persons	Days	DAYS PER WEEK								Average
			—1	1	2	3	4	5	6	7	
Male.....	1,802	10,173	1	8	19	50	81	217	1,415	11	5.6
Female....	5,136	28,663	1	16	60	137	266	887	3,767	2	5.6
Total..	6,938	38,836	2	24	79	187	347	1,104	5,182	13	5.6

This table shows that 75 per cent of the employees worked six days. The rest lost a day or more and a few worked on Sunday too. The latter were all in New York City. Up-state

the loss of time was greater, the average number of days worked there being about five a week. More women lost some time than men, but their absence was for shorter periods.

HOURS

There is not much point in recording the number of hours usually worked by given plants, if they were not running according to schedule at the time for which the earnings of operatives are given. We have said that although the time selected for investigation is ordinarily the busy season, many establishments up-state were not working full time because of the peculiar national and international conditions then existing. Nevertheless it may be said that a 54 hour week, with a 9 or 10 hour day, 60 minutes for lunch and Saturday afternoons off in summer, is the usual practice.

The number of hours worked by operatives whose wages for the period are given is a more important matter. Naturally, since earnings depend upon time worked, we must know how long these people labored to make the sums recorded. The following table shows for over 5,000 persons, the hours worked in one week.

TABLE XXI
HOURS WORKED IN ONE WEEK

	AGE GROUPS						TOTAL		PERCENT	
	14-15		16-17		18 and over					
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male
Totals.....	22	128	122	683	1,295	2,937	1,439	3,748	100.	100.
<i>Hours</i>										
48 and less.....	16	105	27	194	334	937	377	1,236	26.2	33.
Over 48, including 54.	3	23	63	421	400	1,750	466	2,194	32.4	58.6
Over 54, including 60.	3	....	25	68	521	249	549	317	38.1	8.4
Over 60, including 66.	....	....	6	....	22	1	28	1	1.9	....
Over 66, including 72.	....	....	1	....	13	....	14	....	1.0	....
Over 72.....	....	....	....	....	5	....	5	....	.4	....

By no means all factories record working hours. Many do not do so for employees on piece rates. In the better organized plants we found records for both. The data given above are from

the books of the companies. It may be added that where such records are found, the management is apt to be businesslike in other respects.

From these entries it appears that most women worked 54 hours or less, and most men 54 hours and over. It is clear that the 48 hour law for children was violated in 29 cases during a week; the 54 hour law for women in 318 cases, and the same regulation for males under 18 years in 32 instances. It is only fair to state that most of these infractions were in New York City during a busy period.

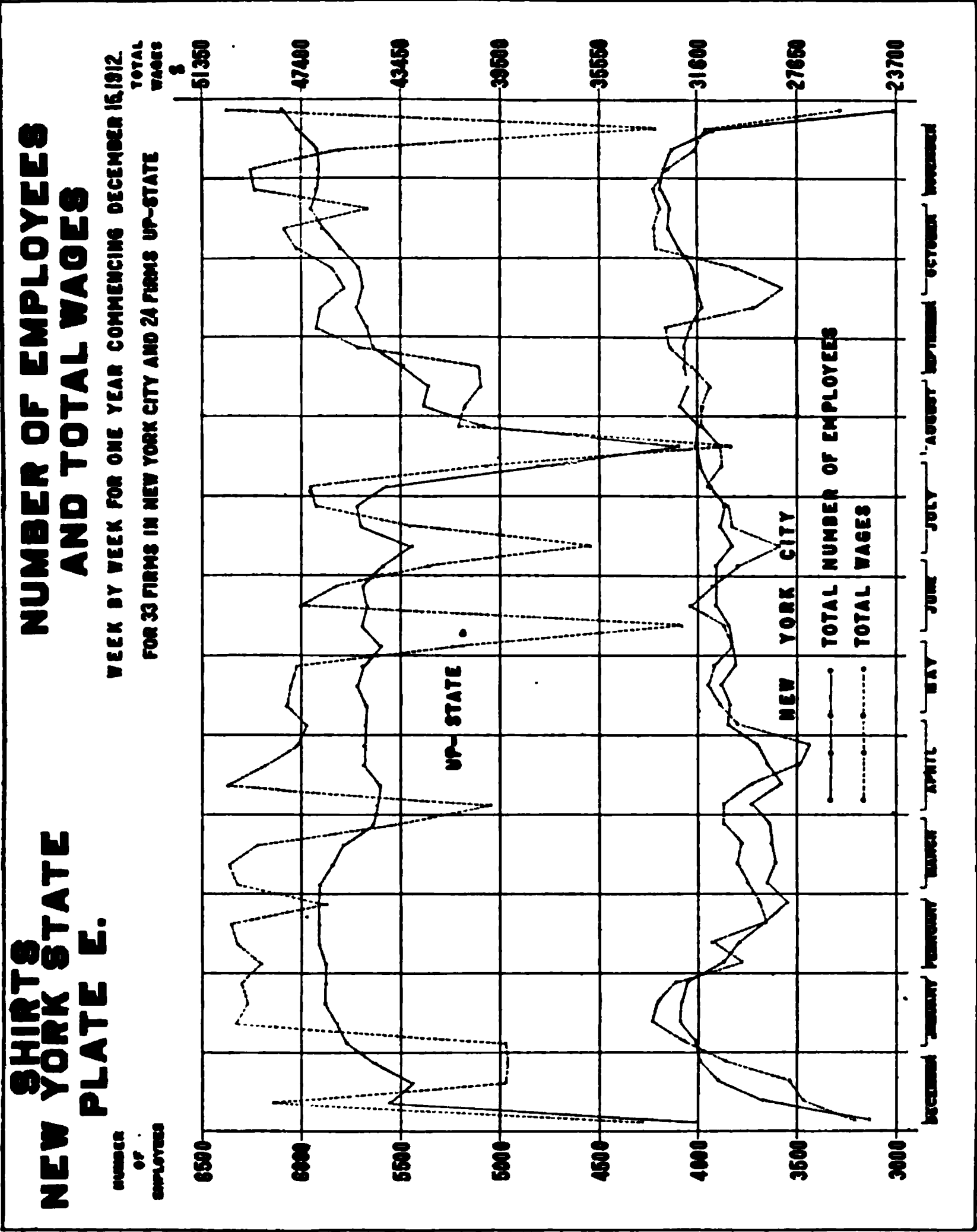
Putting together the legal violations of women and children and hours beyond the usual working time for men in the establishments investigated, we have the following exhibit of overtime:

TABLE XXII
PERSONS WORKING OVERTIME IN ONE WEEK

PERSONS	HOURS OVER												Total
	—1	1	2	3	4	5	6	7-9	10-12	13-15	16-18	19 +	
Male.....	1	6	4	7	27	3	9	11	9	5	4	1	87
Female.....	211	32	55	16	5	4	13	1	...	...	...	...	337
Total....	212	38	59	23	32	7	22	12	9	5	4	1	424

These instances are taken from the records of 43 firms throughout the State. The total number of persons employed by them was 4,017. In other words, incidentally to our examination of wage data, we noted 379 violations of the labor law and 45 cases of unusually long hours. Over 10 per cent of the persons in the plants in question worked overtime periods, averaging only a little over an hour a week in the case of women and girls; but over an hour a day in the case of men.

FLUCTUATION OF EMPLOYMENT.



The chart presents a comparison of the data obtained for 33 firms located in New York City and 24 firms up-state. Both sets of curves show clearly the relative steadiness of the numbers employed, which is a reflection of the fact that employment in this industry is predominantly at piece rates. It would appear

that, regardless of fluctuation in earnings, the workers do not largely seek, nor readily obtain, alternative employment during the duller periods.

In New York City, the factories represented make a great variety of products, ranging from the cheapest work shirts to elaborate negligees, but the output is overwhelmingly of the low-priced grades, for the jobbing trade. Production in these lines has little to do with changes of style or with seasonal demand, and orders are taken far in advance of delivery. The curves show what there is of a busy season is distributed over a large portion of the year. During practically half the time (28 weeks) earnings are above the average for the year, though only moderately, with no sharp fluctuations. The number of employees, compared with the annual average, is increased by 8 per cent at the period of greatest employment, and decreased 8.5 per cent at the time of minimum employment. Earnings, likewise, show an increase of 9 per cent, and a decrease of 11 per cent.

The very different character of the up-state section of the industry is clearly shown in the chart, despite the fact that the curves are a composite of data for factories of different localities and products. The variations are not only greater, but they are also more frequent and spread throughout the year, owing to the fact that piece rates are much more prevalent up-state than in New York City. The summer months are distinctly the dull period. The fact that much of the product goes direct from manufacturer to retailer results in concentrated operation; but the periods are not always the same for different factories. The earnings are above the annual average during a period of 33 weeks, and for most of this time the increase is very marked. Compared with the average for the year, the number of employees at the height of employment is increased by 6 per cent; and at the lowest point is decreased by 27.3 per cent. The corresponding figures for the variations in earnings are an increase of 12 per cent and decrease of 32.6 per cent. It should be noted, however, that the large decreases are for short periods only. The greatest decrease occurs during July and August, when some factories close almost altogether for a period of about

two weeks. The minor sharp but brief decreases are accounted for, as usual, by the occurrence of holidays.

The adjoining table presents briefly the salient facts indicated by the chart.

TABLE XXIII
EMPLOYMENT AND WAGES

	New York City	Up-state
Average number of employees.....	3,873	5,648
Maximum number of employees.....	4,184	5,966
Minimum number of employees.....	3,549	4,108
Increase of maximum over average.....	8. %	6. %
Increase of maximum over minimum.....	18. %	31. %
Decrease of minimum below average.....	8.5%	27.3%
Average amount of weekly wage payments.....	\$30,551	\$45,043
Maximum amount of weekly wage payments.....	33,433	50,395
Minimum amount of weekly wage payments.....	27,151	30,328
Increase of maximum over average.....	9. %	12. %
Increase of maximum over minimum.....	23. %	66. %
Decrease of minimum below average.....	11. %	32.6%

These seasonal or occasional fluctuations in business not only cause variations in the total payroll, but also affect the earnings of individuals retained. One method of avoiding a complete shut-down is to work short hours every day or only on certain days of the week. This, of course, reduces the pay of both time and piece workers. The latter are frequently given a small number of sections sufficient to keep them going part of a day. In this way, receipts fall below the usual level. On the other hand, in a busy season or in view of a rush order, all hands may be speeded up and some work overtime, as we have seen.

For 197 female employees interviewed in New York City factories, \$6.67 was found to be the average wage under normal conditions of the trade. In rush seasons this rises to \$7.39, and falls to \$5.13 in dull periods, that is, a variation from 10 per cent above normal to 22 per cent below. An oscillation amounting to nearly one-third of the ordinary income must cause grave uncertainty among persons who expect to live on less than \$7 a week.

Up-state our agents questioned 85 women and girls upon this matter. In this number they found fourteen who reported no marked variation in wages from season to season. Of these, 3

were receiving less than \$5 a week at the time of the investigation, and the other 11 from \$6 to \$12. The median wage for the remaining 71 according to our records was \$6.87. According to their own statements, their median wage at other seasons fell to \$6.03. In individual cases the fluctuations are very wide—in one instance from \$3 last spring to \$10 in other seasons. In another case it was from \$12 down to \$5. But the net result of these variations was to reduce the mean weekly earnings 12 per cent below the level reported when the investigation was under way.

SHIFT

Of course this variation in the total number of persons employed results in the displacement of many workers. But beyond this rise and fall due to trade conditions, we find that many individuals change their positions. In one factory whose payrolls were checked for a year, we found that out of a total of 415 persons who had been employed during twelve months, 69 (17 per cent) stayed from one to four weeks; 101 (24 per cent) from five to sixteen weeks; and only 122 (29 per cent) forty-nine weeks or over. In the case of 93 persons their period of employment had been divided between two branches of the business. This internal shifting without doubt enabled some to remain longer than would have been the case had they been engaged in the manufacture of only one product, because slack work in one department could be partly offset by turning a part of the force into the other shop.

Naturally, such moving about causes loss of time between jobs. Of 94 women workers up-state who made definite statements regarding this matter, only 10 reported no time lost during the preceding year. Forty-five lost from one day to two weeks from slack work or closing of the factory, averaging 11 days apiece. Forty-one lost from a day to two months from illness, sickness in the family or other personal causes—an average of 18 days each. Some had experienced losses from both industrial and personal reasons. Of 7 who specified loss from all causes, the average time away from work during the year amounted to 22 days for each one. This does not include holidays nor vacations. Six holidays during the year were paid for in 41 cases

and unpaid in 16 instances. Vacations of one or two weeks were reported with pay in four cases; without in sixteen. Most factory workers are not given regular vacations, unless periods of enforced absence from work be considered in this way. Of course piece workers lose when they do not produce.

We have the testimony of 177 female employees in New York City, concerning their vicissitudes during the year 1913. Some of them had not been in the shirt trade for the entire twelve months preceding, but their experience is pertinent to the inquiry regarding general conditions, which such persons must meet. We may briefly summarize our findings in a few remarks.

Eighteen persons had been out of a job entirely from one week to six months. Seventy had lost from one week to four months because of slack work. For 102 women who reported loss from industrial reasons, the average time out was over 34 days apiece. Fifty-two lost from a few days to three months because of personal illness, averaging 15 days each, and 111 were out because of sickness or other trouble in the family. In short, 152 women (86 per cent of all) reported the loss of 5,502 days during the past year, or more than a month each.

ANNUAL EARNINGS

Having presented this summary account of general conditions in the trade and of the experience of typical workers, we may now attack the difficult problem of estimating the annual earnings of a shirt maker. We could be sure of this only by following a large number of workers through the trade for a year. This is a difficult matter, not only because the workers shift, but because in many factories the records are incomplete. Nevertheless we have succeeded in recording the earnings of 1,647 employees on the payrolls of up-state factories, back for as many weeks as they were entered within the preceding year. Needless to say, factories where such records are available are usually the best managed, and the persons remaining on their rolls are in general the most competent workers.

The following table shows the average wage of employees by sex, according to the number of weeks worked in the factories previous to the investigation:

TABLE XXIV
AVERAGE WEEKLY WAGE BY TIME WORKED — UP-STATE SHIRT FACTORIES

WEEKS WORKED	MALE			FEMALE		
	Number	Per cent	Average wage	Number	Per cent	Average wage
1- 4.....	15	5.2	\$11 37	49	3.6	\$5 56
5- 8.....	11	3.8	7 25	53	3.9	6 69
9-12.....	4	1.4	15 50	33	2.4	6 29
13-16.....	3	1	9 50	51	3.7	6 87
17-20.....	5	1.7	8 50	42	3.1	6 50
21-24.....	10	3.5	10 67	51	3.7	6 42
25-28.....	6	2.2	12 50	72	5.3	10 50
29-32.....	8	2.8	9 50	39	2.9	6 75
33-36.....	14	4.9	10 50	37	2.7	5 42
37-40.....	13	4.5	9 75	50	3.7	6 50
41-44.....	13	4.5	10 50	77	5.7	6 47
45-48.....	27	9.4	12 75	167	12.3	7 42
49-52.....	158	55.1	14 08	639	47.	7 84
Total.....	287	100	\$12 70	1,360	100	\$7 46

From this table there appears to be some correlation between weeks worked and average earnings. The relation is uncertain from these figures, however, because all occupations are massed. It is partly due to the fact that the kinds of workers taken on vary somewhat with the season. Table 191 in the statistical appendix shows the distribution according to the work done. Here we may simply point out that the persons in question averaged higher than the trade as a whole, as might have been expected.

Taking the earnings for those who had worked 43 weeks or over within the preceding twelve months we have the following exhibit:

TABLE XXV
ANNUAL EARNINGS — UP-STATE SHIRT FACTORIES

AMOUNTS	MALE		FEMALE	
	Number	Cumulative per cent	Number	Cumulative per cent
Less than \$200.....	3	1.2	37	4.4
\$200-\$249.....	5	4.2	48	10.2
250- 299.....	2	5.2	97	21.7
300- 349.....	5	7.8	129	37.2
350- 399.....	2	8.8	142	54.
400- 449.....	12	15.	130	69.5
450- 499.....	4	17.	81	79.2
500- 549.....	13	24.	62	86.6
550- 599.....	11	29.5	53	92.8
600- 649.....	19	39.5	28	96.5
650- 699.....	25	52.4	12	97.6
700- 749.....	24	64.8	11	99.
750- 799.....	15	72.5	3	99.4
800- 899.....	26	86.	2	99.7
900- 999.....	13	92.7	2	99.9
1,000+.....	13	100.	1	100.

Again we refer the reader to Table 192 in the appendix for the distribution according to occupations. It is sufficient here to emphasize the fact that over half of the best paid steady male workers in these factories earned less than \$700 in ten months or over, and that over half the women and girls failed to get as much as \$400. One hundred and eighty-two female employees could not make \$300 within this period. If we calculate the earnings of the women and girls on the basis of their average weekly earnings, over half of them would fall below \$400 for 52 weeks' work. But nearly 40 per cent of these female employees had worked in their present positions less than ten months previous to the time they were enumerated. These facts give us some idea of the effects of fluctuating wages on annual income.

HOME WORK

Our agents found homeworkers listed on the payrolls of several factories. Sixteen of these in the Troy section were visited by Miss Alice S. Cheyney, from whose report the following paragraphs are quoted:

"The home work done on shirts is now practically confined to what is known as 'turning' of neck bands, cuffs, and the now only occasionally made wrist bands. This so-called 'turning' really involves two processes. The band, or cuff, is usually of three layers, the outside, the facing and the stiffening. These are cut in the factory and stitched together around three sides. In the case of the neck band, the piece which is to form the fly protecting the collar button is stitched with them. They must then be turned, with the raw edge inside, creased with the fingers when turned and then pressed with a hot iron before they are in shape to receive the final or 'top-stitching' which is visible on a finished band or cuff.

The old fashioned, round cornered cuffs, could be turned over a blade of steel, with a rounded end. This was very easy. The square cornered cuffs, now almost exclusively made, and the neckband, must, after the turning proper, be picked square at the corners with an awl. They are then quickly run through the fingers for creasing and laid aside to press. The rather coarse goods can be pressed almost without looking. Piqué must follow

the welt and have an even bead when stitched and so requires great care. Silk is even more difficult as it creeps under the iron and stretches readily. Many people refuse to take it, especially the older women who find it hard to adopt new and more painstaking ways. There is also a slight difference in the difficulty in handling cuffs according to whether the facing or outside is to be turned away from the other two parts. In the one case a fold at the unstitched edge must be kept intact; in the other, not.

“The pay varies with the difficulty of the work, but as the better paying work takes much longer than the simple, opinions vary as to which pays best in the end and there is probably no difference except such as arises from the particular aptitudes of individuals. One firm returns imperfect work to be corrected. There seems to be among the homeworkers, general ignorance in regard to all but their own line of work. They work upon a certain sort of band or cuff, acquire some facility in handling it and concern themselves with no other. A few of the more enterprising, of course, make a point of doing all sorts and grades of work and by so doing are more continuously busy.

“The usual price for collar bands is $2\frac{1}{4}$ cents a dozen, or as it is paid, $4\frac{1}{2}$ cents for the bunch of 2 dozen. An especially simple sort brings 4 cents a bunch, and dress shirt bands which are really a pair of bands (to allow for openings back and front) bring $3\frac{1}{8}$ cents per bunch. One woman reports working for a Cohoes factory for $2\frac{3}{4}$ cents a plain bunch. Silk bands bring 6 cents a bunch.

“The simplest cuffs are 5 cents a bunch. If the fold mentioned above must be kept they are 6 cents. Silk cuffs are 7 cents and $7\frac{1}{2}$ cents. A woman reports turning for the Cohoes factory at the rate of $4\frac{1}{2}$ cents for a bunch of 4 dozen of the old round corner cuffs which are still made there. The book recording the week's work is turned into one factory by the driver, and returned through him, on Friday.

“Estimates of the time required per bunch are for such various work that they are not commensurate enough to confirm each other. Entirely unprompted estimates, however, of what can be earned in a day or week all bear each other out very closely indeed. With one exception the women spoken with and those they mentioned did some house work, but that need not have been

more than is done by the housekeeping factory workers. Their day is extended far into the evening in unbroken hours on shirt work and begins again very early in the morning. The universal statement was 'a dollar a day is doing well'. This means gross earnings without the deduction made for delivery of work. One woman had occasionally made \$8 by letting her house work go and working morning, noon and evening, but she could not continue the pace for many successive weeks. Another had made \$8 a week for two or three weeks before Christmas but she had to pay her extra earnings to the doctor. One especially favored young woman who is the daughter of the forelady in the Cohoes factory, has made \$7 a week when sending out her washing.

"Out of these earnings must be paid the charge for bringing the work. In Cohoes the women make their own arrangement, either sending a small boy or some member of the family. In Troy only two women report bringing the work themselves, and these are evidently for some reason exceptionally favored. The others are all under the impression that, to avoid confusion, they must take it through the authorized deliverers. These men have regular routes which they cover each day and though authorized by the factory and delivering the pay envelopes to all the home workers, their income comes from the latter, and not from the factory. In Troy the charge is 50 cents a week with a deduction of 10 cents for every day on which there is no occasion to call. In Green Island (to which there is a bridge toll) the rate is 10 cents a day and 60 cents a week; and when there is no work the man collects and leaves empty baskets and charges just the same. One woman got, in a poor week, 72 cents worth of work and paid out 60 cents for this delivery farce. The answer of the deliverer is that he works, not for the factory, but for the homeworkers and must have his income if he is to be there when work comes again. The heating of the irons involves, in summer, another expense directly chargeable to the work.

"A few women reported periods in their own or their neighbors' lives when homework had been their sole source of income, but no one could imagine any one relying on it *now*. Formerly, buttonholing was done by motor machines at home and banding, to some extent, and women even did stitching on foot power machines.

Girls who had worked in the factories when the employees had to own their machines had taken them home with them and when they married had continued working or sold them to others. This has practically all gone out and only a few, who have done such work for years, are allowed to continue with it.

“Until two years ago homework on shirts afforded a reliable, if none too generous, source of income. For the last two years work has been irregular. Last summer there was a time when it practically stopped for two months. Since this Christmas it has been very slack and is threatening now to stop again, having for some people already stopped altogether. No one knows when a slack time is coming. Quite without warning the basket will contain only half the usual amount, or be empty for three days in a week, or a whole week at a time and then, equally suddenly, the work will begin again. Work is supposed to be retained no longer than two days and, while there seems to be no system of compulsion, people are urged to come to time and every effort is made to return the work promptly for fear of falling from grace with the dispensers. Occasionally, a pink card will announce that an order must be rushed and much more than the day's work must be crowded in before the wagon calls the next morning. One woman reported having had these orders two or three times this spring but considers them to be less frequent than formerly on account of the greater proportion of work being handled in the factory. Others report that boys used to call for rush orders as soon as they were ready, but now all such very hurried work is handled 'inside'. Many can remember the time when the factories were sending around notes asking people to do homework, but now the people are begging for the work. Women now come to the collar factories and coax for 'just enough to pay for the day's milk' but there is not enough work for the regular workers. The factory hires a lot of people to work inside on the big orders and then drops them. The work in the factory also is now, of course, very slack.

“The work itself is simple and scarcely requires any skill. It can be taken up and laid down and done anywhere. Only a couple of those seen report it as especially wearing. These have become nervous with the hurry and monotony. It seems to be a

bona-fide instance of the proverbial homework claimed not to need to pay a living wage since it gives some earning to persons tied at home and already partly provided for. One worker owns a house, lives in part of it and rents the rest; another has a pension; two live with grown sons and only want to pay their more personal expenses. The rest with one exception are members of families where the lion's share of responsibility is borne by some outside worker or workers. All but two of the women seen are native Americans and far too intelligent and well trained to spend their time turning things right side out. Of the two not Americans, one is a bright French girl working at home while her sisters are in the factory; the other is a Polish woman (the above mentioned exception) who depends entirely on homework. Twelve years ago she and her husband and three half grown children used to make \$5 and \$6 a day all working together up to 10 o'clock at night. They sent to Poland the money they did not need. The two girls are now married and the boy has died, but there are three or four younger children, the older of whom help, by bunching and tying the lots after school. The work is now so poor that there is not enough to keep one person busy and the woman makes just enough to keep the family from day to day, on 20 bunches of cuffs at 5 cents a bunch. The husband has gall-stones and cannot do any heavy work; she has a bad ear but has no money to go to the doctor, for the basket has not come at all for the last few days. Their only thought now is to get back to Poland. She has tried to teach other Polish women to do the work but they have soiled it or scorched it or sent it back crooked and for one reason or another, have not been trusted with more. The appearance of the houses where unsuccessful attempts were made to find two other Polish women made this seem a very likely story. Theirs were the only distinctively foreign names appearing on the list of homeworkers and no one had heard recent reports of foreigners doing this work.

“From the report of all these persons, it appears that the work is not merely temporarily slack, and that it will continue to be absorbed into the factory unless some new counter current should arise. There is but one very young woman among those seen — the married daughter of the forelady. Of contractors, such as

there are on the collar work, there was no rumor. There were tales of Armenian contractors making buttonholes and if this business persists, it would seem likely they also work on shirts, but they are only reported in connection with collar work. One can hear of girls working in the factory all day and taking home collar work to do at night, but they never seem to be shirt workers. And one hears of persons and families galore living by homework on collars but never by homework on shirts. Even the men delivering the work are on collar routes and merely carry shirt work with the collars. The current of the industry is evidently toward the factories and it is not merely bad times that makes everyone refer to the homework as of constantly decreasing proportions and importance."

From the records of the firms we derived the following information concerning the age, conjugal condition, term of employment and earnings of homeworkers in the Eastern District upstate.

Of 51 women whose ages were recorded, 14 were between 21 and 40 years of age, 13 were between 40 and 45, 12 between 45 and 55, 10 between 55 and 65, and 2 over 65. The median is 44 years and 5 months. The business therefore seems to be in the hands of middle aged women.

Of 75 whose conjugal condition was noted, 15 were single, 48 were married, 11 widowed, and 1 divorced. According to these returns nearly two-thirds of those who work at home are married.

Of 50 whose term of employment with the firm during the previous twelve months was given, 13 had received work from one to twenty weeks in the year, 10 from twenty-one to thirty-six weeks, 9 from thirty-seven to forty-eight weeks, and 18 had been employed more than forty-nine weeks. The median term is 44 weeks. The work appears to be comparatively steady for these persons.

As to earnings, the following table shows the weekly payment for 100 cases.

TABLE XXVI
WEEKLY EARNINGS OF 100 HOME WORKERS
UP-STATE SHIRT FACTORIES—EASTERN DISTRICT

AMOUNTS	Number of persons
Less than \$3 00.....	45
\$3 00-\$3 49.....	11
3 50- 3 99.....	12
4 00- 4 49.....	4
4 50- 4 99.....	3
5 00- 5 49.....	3
5 50- 5 99.....	3
6 00- 6 49.....	4
6 50- 6 99.....	4
7 50- 7 99.....	2
8 00- 8 99.....	2
9 00- 9 99.....	2
12 00-12 99.....	1
14 00-14 99.....	1
16 00-17 99.....	1
18 00-19 99.....	1
20 00-24 99.....	1
Median, \$3.23.	

This table shows that over half the women earned less than \$3.50 for a week's work. How many dozen pieces or how many hours' time this represents, we are unable to state. Neither can we be sure that only one person did all the work. In the case of the high amounts we are led to believe that members of the family or other persons helped to turn out the batch.

With this caution as to the value of the returns, we may add that for 18 women who worked over 49 weeks during the twelve months preceding the investigation, the median weekly earnings were \$7. Here we seem to find a moderately lucrative employment. Doubtless these persons are the most skilled operatives known to their employers. For the others who work occasionally the income is low and precarious, as before indicated. Extensive competition for this kind of work would doubtless tend to lower the wages of regular factory employees.

WAGES AND CONJUGAL CONDITION

The mention of homework at once suggests a comparison of earnings according to marital condition. Table No. 95 in the appendix shows in detail the distribution of weekly amounts received by each class of persons. We may here summarize it for purposes of comparison in the following form:

TABLE XXVII
MEDIAN WEEKLY EARNINGS BY CONJUGAL CONDITIONS

	Single	Married	Widowed and divorced
Male.....	\$8 65	\$12 45	\$13 25
Female.....	6 56	7 00	7 53

As might have been expected, the majority of those who are or have been married earn more than single persons, because the latter are generally younger and less experienced in the work. Nevertheless, we note that 479 married men (one-third of the entire number) received less than \$10 for one week's work, and 176 widowed and divorced women (one-third of this class) got less than \$6. Of course we do not know how many of these persons had relatives who added to their earnings; but their general status suggests that the women were working to sustain themselves and the men were responsible for the support of others. Such cases show where economic stress is liable to fall.

EARNINGS AND NATIVITY

Not all homes are run on the same standards. Particularly in the foreign sections of our large cities we find groups of people with notions of living more primitive than those which prevail among native Americans. Many of these people are seeking a foothold in an entirely different kind of economy from the simple one to which they have been accustomed. They are obliged at once to earn a living or return to the rigors of their former homes. They seek any unskilled or semi-skilled occupation to tide them over the period of settling down, and may have to accept almost any wage offered for their work. Frequently their own ambitious countrymen "sweat the greeners" to rise to the standards of the new home. This sort of exploitation is common in the sweat shops of New York city.

Russian, Polish and Austrian Hebrews have recently entered the clothing trades in great numbers. Even more recently Italians have come in, and a few Armenians are beginning to appear. Unquestionably this flood of half skilled labor has filled the market with cheap help, which, by its competition, has held

down the level of wages in certain trades. Unionization among people speaking different languages is difficult, and among girls and women, doubly so. The result has been that foreigners as a whole have been pushed into the less skilled occupations and have been obliged to work for low wages. How this is shown in the shirt trade, the following table makes plain:

TABLE XXVIII
MEDIAN WEEKLY EARNINGS BY NATIVITY AND SEX

	Native	Foreign
Male.....	\$11 26	\$10 19
Female.....	6 75	6 56

For the full distribution, the reader is referred to Table No. 96 in the appendix. The figures above make it plain that the wages of both men and women who were born abroad are generally lower than those of natives, and this despite certain differences in age, which have been pointed out in an earlier section of this report. The difference is reflected in local wage levels. Troy manufacturers have told us that they find the competition of the East Side shops of New York City in the cheaper lines of goods difficult to meet, because the cost of hiring Irish American girls is greater than that for Polish and Italian women.

PRISON-MADE WORK SHIRTS

The employees in a shirt factory are subject not only to the competition of homeworkers and foreign labor, but in the cheaper grades of garments they must also meet the level set by contractors with prison labor in other States. Sixteen State institutions, reported to have contracts for prison labor on work shirts, were asked to give an account of conditions and wages in their shops. Nine replied, of which number five gave the facts summarized below:

1. They employ 1,083 men and 25 women, or a total of 1,108 persons.
2. The hours of labor are usually nine per day and from 49 to 54 per week.
3. The rates paid by contractors vary in method of payment and in amount. Some pay by the dozen, others by the worker. The rates paid by the dozen vary from 36 cents to 50 cents. The rates by the worker vary from 45 cents to 66 $\frac{2}{3}$ cents per day.

4. Out of the 1,108 employees involved, 585 earned at the rate of \$73.69 per full year, or at the rate of \$6.14 per month. Such amounts are allowed reasonably good workers. Others work at the rate of \$2 per month, and still others at the rate of 5 cents per day. In all cases recorded, they are paid for "overtasks."

5. The State usually furnishes the light, heat, water, shop room, care of plant, power, and guards necessary for the manufacturing. One State furnishes the machinery too.

6. Two of the State prisons manufactured a total of 126,455½ dozens of shirts in 1913, which brought in a receipt of \$58,597.48 or at the rate of 46 cents per dozen.

7. The work done usually consists of cutting, sewing, pressing and packing.

It will be seen from these figures that the cost of making shirts in prison is less than the wages of free labor for sewing alone. Practically all overhead charges except the maintenance of machinery are paid by the State, and steadiness is enforced by guards.

It is frequently stated that the efficiency of prison labor is less than that of free working men. This may be true, but the competition of goods made at such low rates affects the market in which the factory owner must compete and obliges him to cut wages accordingly.

This traffic is a serious matter in New York, because goods can be shipped here from Maryland, Rhode Island and Vermont. The State law prohibiting the sale of prison made goods is not effective for those brought in from other commonwealths. A national law is necessary in order to make such a measure constitutional.

LABOR COST

The foregoing data regarding wages lead us finally to consider the proportion that labor cost bears to other items of expense in the shirt trade. For this purpose we may here present statements from representative manufacturers regarding typical garments made in their establishments. We have few complete financial accounts so as to be sure of the element of profit. The following examples may, however, serve to indicate the basis upon which certain firms do business.

Let us take as our first instance a blue chambray work shirt, double stitched, with a soft collar and cuffs attached, one pocket,

sleeve facings and seven pearl buttons. The following analysis shows the principal items of expense for making a dozen garments. It does not show the cost of trimmings.

34 yards " Defiance " 3.8 twenty-eight-inch cloth, at 6½c.....	\$2 21
Cutting.....	08½
To contractor for sewing.....	84
Pressing.....	04
Packing and shipping.....	07½
Factory overhead charges.....	02½
<hr/>	
Cost to manufacturer.....	\$3 27½

These shirts are sold to jobbers at \$3.50 a dozen, leaving the manufacturer about 20 cents above the expenses noted. They retail at 50 cents a piece.

For work shirts such as we have just described and similar garments of somewhat inferior grade, which sell to the trade for \$3 per dozen, the cost of sewing and finishing varies from 65 cents to 85 cents a dozen, according to the style and quality of workmanship. From 70 cents to 75 cents a dozen was the usual price for a \$3 grade in the shops last winter. The material used was worth less than that specified above, so that the manufacturer's cost was about \$2.85 a dozen garments. The following analysis of the items of expense for making a dozen such shirts is taken from the accounts of an East Side factory.

Material.....	\$1.8600
To contractor.....	.7248
Cutting and packing.....	.1067
Other manufacturing costs.....	.0155
Selling and delivery.....	.1277
Office expenses.....	.0126
General expenses.....	.0090
Profit.....	.1437
<hr/>	
Total.....	\$3.00

The financial statement of the firm referred to for the year ending December 31, 1912, is summarized below:

Items	Per cent of sales
Cost of material.....	61.98
Paid to contractor.....	24.16
Labor of cutting and packing.....	3.55
Other manufacturing costs.....	.52
Selling and delivery.....	4.26
Office expenses.....	.42
General expenses.....	.29
Net profit.....	4.82
<hr/>	
Total.....	100

As already indicated, much of the sewing is done in the shops of contractors. Especially in New York City we found establishments that sublet practically all of this work, only cutting being done in the firm's own plant. The work of the contractors is, therefore, practically uniform, and may profitably be further analyzed. The cost of making up a dozen work shirts which are sold by the manufacturers at \$3.25 to \$3.50 per dozen, is itemized as follows by an East Side firm:

ITEMS	Per dozen shirts
Labor.....	\$0.5033
Material (thread, etc.).....	.0617
Other manufacturing costs.....	.1055
Delivery.....	.0206
Office expenses.....	.0056
General expenses.....	.0081
Administrative salaries.....	.0624
Net profit.....	.0241
Total.....	*\$0.7913

The financial summary of this firm for the year 1912 is added for comparison.

ITE	Per cent of proceeds
Cost of labor in manufacture.....	63.60
Cost of material.....	7.80
Other manufacturing costs.....	13.34
Delivery.....	2.60
Office expenses.....	.71
General expenses.....	1.03
Administrative salaries.....	7.89
Net profit.....	3.03
Total.....	100

To sum up this analysis of costs for low grade shirts in New York City, it appears that the materials in a 50 cent work shirt cost less than 20 cents and the labor of making it about 5 cents. The contractor and manufacturer each make about 5 per cent profit, and the rest is absorbed by jobbers and retailers. The cost of materials and labor is somewhat higher for the better grades of work shirts, but the total cost in relation to the selling price is

* Contract price per dozen.

proportionately less, leaving a larger margin of profit to makers and dealers. What per cent the makers earn upon their investment we do not now know, because capital accounts and inventories to show annual turnover were not available. Neither could we ascertain with certainty the extent of trade discounts for this class of goods. We were informed, however, that considerable speculation in the prices of both materials and finished products exists.

Turning next to the standard grades of negligee and dress shirts produced in the Albany-Troy district, we offer for inspection the following analysis of costs for three ordinary garments as presented by three representative firms in that region.

	FIRM A	FIRM B	FIRM C
	Coat negligee with pocket and laundered cuffs	Coat negligee, plain front, soft cuffs	Coat negligee, plaited bosom, laundered cuffs
Material and trimmings.....	\$3 58 per doz..	\$6 21 per doz..	\$5 76 per doz.
Cutting.....	17 " " ..	25 " " ..	36 " " .
Making and examining.....	1 12 " " ..	1 59 " " ..	1 54 " " .
Factory overhead.....	37 " " ..	1 16 " " ..	46 " " .
Laundering and boxing.....	1 38 " " ..	1 28 " " ..	2 20 " " .
Total cost of manufacture.....	\$6 62 per doz..	\$10 49 per doz..	\$10 32 per doz.
Selling price.....	*6 72 " " ..	*12 69 " " ..	15 00 " " .
Retail price.....	1 00 a piece..	1 50 a piece..	2 00 a piece

The feature of this table that strikes one at first sight is the wide variation between total cost and selling price. Firm A evidently sells this garment on a very small margin of profit, whereas the other two appear to net a very large percentage. It may be stated that some firms deal with retailers direct, whereas others sell through wholesale houses. The expenses of selling naturally vary according to the method used. We are also informed that certain lines of goods are sold almost at cost in order to attract the trade to the firm's more expensive specialties. The discounts quoted vary from 3 per cent to 6 per cent. Old styles have to be marked down and closed out periodically.

Another noteworthy point about the foregoing table is the very wide range in the proportion that overhead charges bear to all factory costs. Different methods of accounting locate various

* Less discount.

items under this head. We are inclined to believe that in most instances it is a very rough pro rata charge on any particular line of goods.

On the other hand the proportion of costs for cutting, sewing, and finishing shirts does not seem to differ so widely in the three instances, as might have been expected. We should expect the laundry bills to vary because of the different amount of labor required in starching and ironing the garments in question. The difference in cost of materials needs no comment.

A shirt salesman informed us that an ordinary garment which retails for \$1 costs the dealer about 70 cents and the manufacturer approximately 64 cents. Of the prime cost, probably 23 cents goes for material and 28 cents to 30 cents for the labor of preparing it for the market. According to our figures, this estimate appears to be low for materials and high for labor.

The Federal Census of Manufactures for 1905 gives the following proportions:

	UNITED STATES		NEW YORK STATE	
	Amounts	Per cent of expenses	Amounts	Per cent of expenses
Cost of materials.....	\$25,639,402	59	\$9,997,425	57
Wages of labor.....	11,233,392	26	3,715,039	21
Miscellaneous expenses.....	6,451,006	15	3,902,000	22
Total expenses recorded.....	\$43,323,800	100	\$17,614,464	100
Value of products.....	\$50,971,105	118	\$20,241,670	115

According to these figures, New York State paid 39 per cent of the national bill for shirt materials, 33 per cent. of all wages to workers, 60 per cent of the miscellaneous expenses, and turned out 40 per cent of the product. It is noteworthy that her proportion for wages was low, when her share in miscellaneous expenses was so high. The latter item is made up mostly of payments for contract work, rent of offices and interest. In other words, subcontracting had apparently put much of the business into the hands of jobbers, with a tendency to encourage speculation and to drive down wages. That these features can be found in the trade to-day we have shown above.

IV. THE PAPER BOX INDUSTRY

I. WAGES IN THE PAPER BOX INDUSTRY

CHARACTER OF SHOPS

For this investigation, the payrolls of 238 factories in 19 cities and villages throughout the State were examined. They varied in size from a shop employing 6 persons, to one with 320 hands. These comprise three-quarters of all shops listed by the Labor Department. Naturally the character of such places differs widely. Some of the small concerns were located in dingy basements and old loft buildings, where working conditions were very bad from lack of proper light and ventilation. Other factories were in modern new plants.

PERSONNEL

Our agents investigated the wages of 11,783 persons employed in all branches of the paper box industry in New York State. Nearly two-thirds of these are women and girls, and about one-half of all are minors. Considering factory workers alone, 72 per cent are females. The proportion of factory workers in each age group is shown in Table I. Throughout this report the figures given are for factory workers in New York State, unless otherwise specified.

TABLE I
NUMBER AND PER CENT OF ALL FACTORY WORKERS, BY AGE AND SEX

	TOTAL		MALE		FEMALE	
	Number	Per cent	Number	Per cent	Number	Per cent
Total.....	10,376	100.	2,920	28.	7,456	72.
Age						
14-15.....	567	5.5	85	2.8	482	4.7
16-17.....	1,945	18.8	290	2.8	1,655	16.
18-20.....	2,783	26.8	534	5.1	2,249	21.7
21-24.....	2,042	19.7	591	5.7	1,451	14.
25-29.....	1,123	10.8	487	4.7	636	6.1
30-34.....	651	6.3	319	3.1	332	3.2
35-39.....	470	4.5	212	2.	258	2.5
40-44.....	312	3.	148	1.4	164	1.6
45-54.....	314	3.	159	1.5	155	1.5
55-64.....	113	1.1	69	.7	44	.4
65 and over.....	12	.1	11	.1	1	.....
Not reported.....	44	.4	15	.1	29	.

Less than one-third of the workers were born abroad, and many more had foreign parents. The proportion of foreigners is slightly higher in New York City where over three-eighths of the factory workers are foreign born. According to the following table, Russians lead in number; English speaking immigrants are not largely represented in the trade; the Jewish element predominates. In New York City the same statement holds, except that the percentage of English speaking immigrants is even smaller.

TABLE II
NATIVITY OF WORKERS, BY SEX

	Male	Female	Total	Per cent of all
Total.....	2,920	7,456	10,376	100.
Native.....	1,399	5,621	7,020	67.5
Foreign.....	1,500	1,811	3,320	32.2
Russia.....	701	865	1,566	15.1
Italy.....	425	244	669	6.5
Austria.....	101	229	330	3.2
Germany.....	91	99	190	1.8
England.....	33	79	112	1.1
Ireland.....	20	77	97	.9
Canada.....	15	55	70	.7
Poland.....	8	39	47	.5
Roumania.....	18	29	47	.5
Hungary.....	13	20	33	.3
Scotland.....	12	18	30	.3
Holland.....	8	18	26	.3
Turkey.....	21	1	22	.2
Greece.....	17	2	19	.2
France.....	2	11	13	.1
Other foreign.....	24	25	49	.5
Not reported.....	12	24	36	.3

Young women of native birth constitute the largest group of the industry, both in New York State and in New York City. On the other hand in New York City foreign men outnumber native adult males three to two, while in New York State a more nearly equal proportion of native and of foreign males is employed. In the following table the number and percentage of all children, young persons and adults in paper box factories is shown according to nativity and sex.

TABLE III
NATIVITY BY AGE AND SEX — NUMBER AND PER CENT OF ALL FACTORY WORKERS

	TOTAL				NATIVE				FOREIGN			
	Male		Female		Male		Female		Male		Female	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Total...	2,905	28.2	7,427	72.1	1,392	13.5	5,604	54.3	1,509	14.7	1,805	17.6
Age												
14-15...	85	.8	482	4.7	68	.6	411	4.	17	.2	71	.7
16-20...	824	8.	3,904	37.9	430	4.2	2,836	27.6	393	3.8	1,058	10.3
21 and over....	1,996	19.4	3,041	29.5	894	8.7	2,357	22.9	1,099	10.7	676	6.6

The next table shows the number and per cent of all factory workers divided by sex according to marital condition. Here again we note the large number of single persons, especially of women. As stated in connection with the confectionery industry, this unusual proportion of unmarried persons is due to the preponderance of young women. But that 88 per cent of all girls and women in this trade are single appears remarkable when we compare this figure with recent census returns. In 1910, only 36 per cent of all females over 15 in New York City were unmarried. The special Federal report on Women at Work gave 65 per cent of all female breadwinners over 16 as single. Our exhibit shows the local paper box industry as a great field for matrimonial prospecting. Seriously, many girls regard marriage as the only way out of the monotony of the work.

TABLE IV
CONJUGAL CONDITION — NUMBER AND PER CENT OF ALL FACTORY WORKERS

	TOTAL		SINGLE		MARRIED		WIDOWED OR DIVORCED		NOT REPORTED	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Male.....	2,920	28	1,707	16.4	1,138	10.9	34	.3	41	.4
Female....	7,456	72	6,558	63.3	567	5.5	286	2.8	45	.4
Both.....	10,376	100	8,265	79.7	1,705	16.4	320	3.1	86	.8

OCCUPATIONS

The following table shows the main divisions of the industry according to the general character of the work performed:

DIVISIONS OF THE INDUSTRY	Male	Female
Paper box making.....	2,920	7,456
Shipping and delivery.....	482	22
Plant help.....	534	41
Office.....	119	209
Total.....	4,055	7,728

As before mentioned, we shall here consider primarily only those persons engaged directly in the making of boxes, leaving clerks, engineers, delivery men, etc. for separate sections of the report. Occasionally, however, we shall indicate the tendency of the trade as a whole, since factory workers constitute so large a proportion of the entire number, and because some shifting from one department to another is not impossible.

PAPER BOX MAKING

The various kinds of boxes—large and small, round and square, solid and folding—require some specialization in manufacture. Certain fancy varieties are made almost entirely by hand; other standard shapes are turned out practically complete by machinery. The making of an ordinary shoe box may, however, serve to illustrate the essential processes. The card board is first cut into correct sizes for top and bottom, the corners are next cut out and the flaps are scored so as to bend up and make the sides. These are then fastened together with glued tabs by a “corner staying” or “ending” machine. Making the pasteboard frame so far is usually men’s work. Then girls turn the box on a block and wind around the sides a strip of pasted paper, which is turned over the edges by helpers. Others put on the top or bottom covering. The box is then practically completed, unless a lining or tape is to be put in. After that, the lids are put on and the boxes are tied up or piled ready for storing or shipping.

The conditions under which these operations are performed naturally differ with the plant considered. Cutting is usually done by one or two competent men. But occasionally we find boys and even girls helping manipulate dangerous machinery. Corner staying and ending machines, as well as special mechan-

isms for punching, counter sinking, etc., are very generally run by young women. Many firms furnish safety devices to prevent crushed fingers; but frequently employees do not use the guards, because they hamper rapid manipulation. In the case of the shield for the staying machine, several workers reported that it increases the danger by presenting a wider surface to catch the hand.*

Most women machine operators and strippers sit at their work. Top labellers and table hands generally stand. The smell of glue is rather distasteful in a close room; and working clothes have to be changed or aprons worn in order to avoid smearing with paste. The pace in a busy factory is pretty fast as many of the skilled operatives are on piece rates, and one process fits into the next.

We must now define more clearly what kind of persons perform the various lines of work. Cutting is a skilled men's trade, requiring some ability to figure out the dimensions required with as little waste as possible, and demanding care in the manipulation of dangerous machinery. Chopping out the corners, scoring, punching in rivets or eyelets, corner staying or ending, require less skill, but demand dexterity to insert and remove material quickly in operating the machines. Both young men and women operate punching and staying machines in the general process of setting up. The making and use of glue on heavy card board are also men's occupations, requiring some deftness and judgment. Covering the sides and tops of boxes with paper (stripping and top-labelling) as well as making and finishing finer boxes (table work) is generally a skilled trade for women, demanding dexterity and neatness. Girls begin by turning in for older hands who do stripping, and thus learn the latter operation. Closing and tying require only an eye for defects and dispatch in assembling parts. Floor work is simply fetching supplies and carrying away finished goods. There are also several miscellaneous or supplementary occupations, such as nailing wooden frames, printing and embossing labels, which need not concern us here. The following table shows the age and sex of persons engaged in the principal factory occupations.

* See special report by Marie S. Orenstein on Accidents in the Paper Box Industry, p. 271, below.

TABLE V
OCCUPATION BY AGE AND SEX — NUMBER AND PER CENT OF FACTORY WORKERS

	Foremen and Forewomen		Cutting		Glue making		Setting up		General machine work		Glue table work		Turning in and stripping		Table work		Clothing and tying		Floor work		Total		Per cent of	
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	All males	All fe- males
TOTALS.....	214	135	859	58	12		391	314	309	581	151		144	3,053	318	2,621	188	293	292	356	2,878	7,411	10.1	100.
Age groups																								
14-15.....	....	....	2	1	....		17	15	4	16	2		11	261	2	97	23	54	22	39	83	483	2.9	0.5
16-17.....	1	2	52	12	....		38	52	30	157	4		20	858	28	392	37	75	77	104	287	1,652	10.	22.3
18-20.....	4	12	137	21	....		79	89	69	232	21		31	1,061	53	639	66	80	67	101	527	2,235	18.5	30.1
21-24.....	26	32	177	9	3		99	99	74	109	30		28	550	84	540	29	49	36	57	586	1,445	20.3	19.5
25-29.....	44	36	153	6	2		89	46	51	31	39		21	192	59	290	10	10	18	20	486	631	16.9	8.5
30-34.....	43	23	98	4	2		45	6	27	13	17		12	64	37	198	11	10	22	11	314	329	10.9	4.5
35-39.....	25	13	77	2	4		17	2	20	10	19		10	31	18	181	4	3	15	10	209	252	7.2	3.4
40-44.....	32	11	56	1	....		2	1	13	1	7		7	18	14	124	2	4	14	3	147	163	5.1	2.2
45-54.....	34	2	69	2	....		4	1	10	5	8		2		18	120	2	4	14	7	161	150	5.6	2.
55-64.....	5	....	31	....	1		1	2	9	3	4		1	3	4	32	1	1	7	2	64	43	2.2	.6
65+.....	....	....	4	....	....		....	....	2	....	....		1	....	1	1	2	....	....	....	10	1	.3	—
Not given.....	....	4	3	....	....		....	1	....	4	....		....	6	....	7	1	3	....	2	4	27	.1	.4

As before stated the great majority of women are engaged in covering and table work — the younger girls as turners-in; the older hands as table workers. The more experienced men run the heavy cutting machinery; the boys serve as their helpers or learn glue work by doing various tasks. There is no regular apprenticeship, but experience in helping cutters or coverers leads toward these more skilled occupations.

Native workers predominate in all lines except glue work, the greatest proportion being employed in the women's occupations of covering and table work. In New York City, where also the greatest proportion of native workers are employed in these women's lines, foreigners tend to predominate in occupations filled by men — glue and machine work, and in unskilled tasks on the floor. This tendency has been remarked in the confectionery industry, where native girls and foreign men are working together in low skilled hand and machinery industries. The accompanying table shows the distribution of 10,261 persons by percentages according to nativity and occupation.

TABLE VI
OCCUPATIONS BY NATIVITY — PER CENT OF ALL FACTORY WORKERS

	Total	Foremen and forewomen	Cutting	Glue making	Setting up	General machine work	Glue table work	Covering	Table work	Closing and tying	Floor work
Native.....	68	2.7	5.3	....	4.4	5.9	.3	23.4	19.	3.2	3.8
Foreign.....	32	.7	3.7	.1	2.4	2.7	1.2	7.8	9.5	1.4	2.5
Total...	100	3.4	9.	.1	6.8	8.6	1.5	31.2	28.5	4.6	6.3

RATES OF WAGES

In few factories is there any exact record of production of time workers. The weekly rates are therefore generally fixed by guesswork, and vary considerably within the same establishment without apparent reason. Neither is there often a systematic determination of piece rates, although in a few places some attempt has been made to standardize piece rates, or at least to get the employees to take an intelligent part in the process. Thus, one factory, whose product is to a large extent stable, varies its piece rates according to the price it obtains for the product. In

another factory, whose operation is very steady, but whose products vary greatly, new articles are given to three workers chosen as slow, ordinary, and speedy operators. Their production for a given time is averaged, and the piece rate is set on the basis of this average. This method seems to work very satisfactorily.

One undesirable feature found in a large number of factories is partnership and sub-contract work. In one factory more than one hundred employees had one or more helpers each, the latter being paid not directly by the firm, but by the "box maker," who received his gross pay on a piece basis. One reason assigned for the prevalence of this practice is the desire of employers to avoid the trouble of keeping the working force recruited up to the needed strength. By the device of paying one person for himself and his helpers, the total wage payment is often reduced, though apparently at the expense of the helpers; and in addition the firm is more assured of its product.

Of the 2,920 male factory workers, 480, or 16 per cent, were piece workers; while of the 7,456 women and girls, 3,250, or about 44 per cent, were on piece rates. These operatives include some of the most skilled hands, so we must first indicate typical rates in order to estimate the amount of work required to earn weekly the sums later to be considered. Naturally the rates vary widely according to the size and quality of the product. They also depend upon whether the box is built by hand or put together by specialized machinery. We shall here mention only a few figures for the principal operations to show the ordinary basis of wage payment. For this purpose we give the middle range of rates quoted in the factories investigated in New York City, where the greatest proportion of workers are employed.

OPERATION	Rate per hundred
	<i>Cents</i>
Setting up — corner staying, ending, etc.....	5-15
General machine work.....	2-15
Stripping.....	6-25
Labelling — all kinds.....	5-10
Table work — putting in lace paper, tapes and general hand finishing.....	5-10
Closing and tying.....	2- 5

The reader must be cautioned against taking these figures as giving the upper and low limits for the payment of piece work. They merely represent typical rates obtained in several of the local plants. They also show that if a girl is getting 10 cents a hundred for covering boxes she must turn out 6,000 a week in order to make \$6; that is, one about every 30 seconds for 54 hours. This figure gives some idea of the speed and deftness required.

Table VII shows the weekly rates quoted for 6,202 employees, classified according to the principal occupations in the trade. Summarizing the data briefly, we may say that from \$10 to \$16 are the most common rates for men. Five and six dollars are the figures most often quoted for all female employees. The majority of men and boys may hope to earn between \$8 and \$16; more than half the women and girls, between \$5 and \$9. Over half the male help is rated below \$12, and the majority of females, under \$6.50.

More specifically, the run of foremen are hired for from \$16 to \$25; forewomen, from \$9 to \$12. Most male cutters receive from \$10 to \$18; women, \$5 to \$7.50. Men who do corner staying and ending usually ask from \$8 to \$15; women are to be had for similar work from \$5 to \$10. Male glue table workers ordinarily range from \$10 to \$14; most women table workers who do pasting and finishing, from \$5 to \$10. Covering, i. e., stripping and labeling, which is pre-eminently a woman's trade requiring some skill, usually brings from \$6 to \$10. Turners-in, who are generally girls learning the trade, are quoted at from \$4.50 to \$6.50. Closing and tying ordinarily brings from \$6 to \$9 for males and from \$4.50 to \$6 for girls. Floor work as a rule brings from \$5 to \$10 for men and boys; \$5 to \$7 for girls.

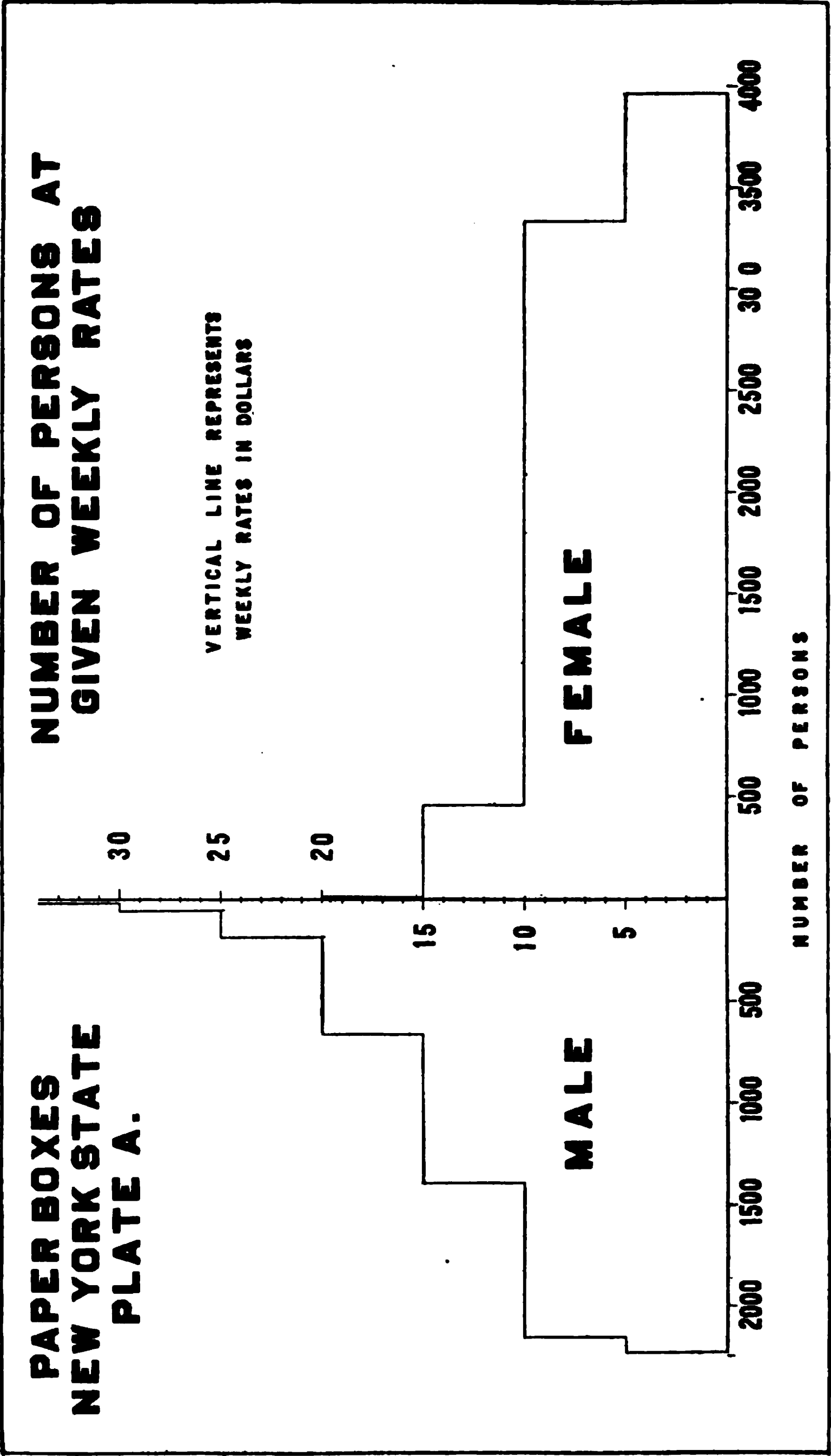
Plate A shows the proportion of wage earners of each sex who receive a given number of dollars per week. (See p. 242.)

TABLE VII
SPECIFIED RATES OF FACTORY WORKERS BY OCCUPATION, FOR EACH SEX

WEEKLY RATES	OCCUPATION												WEEKLY RATES	
	FOREMEN AND FOREWOMEN		CUTTERS		GLUE MAKERS	SETTERS-UP		GENERAL MACHINE WORK		GLUE TABLE WORK	TURNERS-IN			
	Male	Female	Male	Female	Male	Male	Female	Male	Female	Male	Male	Female		
Less than \$3 00.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.. Less than \$3 00
\$3 00-\$3 49.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	17	....\$3 00- 3 49
3 50- 3 99.....	.....	.....	1	1	.....	.....	7	.....	.....	.....	.....	28	.... 3 50- 3 99
4 00- 4 49.....	.....	.....	2	1	.....	.....	6	7	.....	13	4	94	.... 4 00- 4 49
4 50- 4 99.....	.....	.....	1	1	.....	.....	10	12	1	8	1	127	.... 4 50- 4 99
5 00- 5 49.....	.....	.....	15	4	.....	.....	19	18	11	55	4	188	.... 5 00- 5 49
5 50- 5 99.....	.....	.....	.....	1	.....	.....	5	8	6	31	.....	163	.... 5 50- 5 99
6 00- 6 49.....	.....	1	26	7	.....	.....	16	20	26	80	2	225	.... 6 00- 6 49
6 50- 6 99.....	.....	2	14	.....	.....	.....	3	8	14	8	1	42	.... 6 50- 6 99
7 00- 7 49.....	.....	7	19	3	1	.....	16	9	16	44	3	7	.... 7 00- 7 49
7 50- 7 99.....	.....	4	17	3	.....	.....	3	1	8	16	1	.....	.... 7 50- 7 99
8 00- 8 99.....	2	15	33	1	.....	.....	12	22	19	11	5	4	.... 8 00- 8 99
9 00- 9 99.....	.....	15	48	2	2	.....	13	12	20	7	6	1	.... 9 00- 9 99
10 00-10 99.....	.....	27	43	2	2	.....	18	24	31	4	13	1	....10 00-10 99
11 00-11 99.....	1	12	33	.....	4	.....	10	8	18	1	10	.....	....11 00-11 99
12 00-12 99.....	7	25	72	.....	1	.....	22	7	30	3	25	.....	....12 00-12 99
13 00-13 99.....	6	5	46	.....	.....	.....	45	4	4	.....	29	.....	....13 00-13 99
14 00-14 99.....	6	5	42	.....	1	.....	43	.....	5	.....	16	.....	....14 00-14 99
15 00-15 99.....	8	2	73	.....	1	.....	57	1	7	.....	17	.....	....15 00-15 99
16 00-17 99.....	30	3	123	1	.....	.....	27	.....	1	.....	6	.....	....16 00-17 99
18 00-19 99.....	25	1	73	.....	.....	.....	3	.....	4	.....	.....	.....	....18 00-19 99
20 00-24 99.....	69	1	56	.....	.....	.....	2	.....	.....	.....	.....	.....	....20 00-24 99
25 00-29 99.....	28	1	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	....25 00-29 99
30 00-34 99.....	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....30 00-34 99
35 00-39 99.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....35 00-39 99
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....40 00 and over
Total.....	205	126	743	27	12	332	173	221	281	143	3	898Total

TABLE VII
SPECIFIED RATES OF FACTORY WORKERS BY OCCUPATION, FOR EACH SEX (concluded)

WEEKLY RATES	OCCUPATION										WEEKLY RATES		
	STRIPPERS AND TOP LABELERS		TABLE WORK		CLOSING AND TYING		FLOOR WORK		TOTAL			CUMULATIVE PER CENT OF TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		Male	Female
Less than \$3 00.....	.....	2	.....	2	.....	2	1	.....	1	9	.04	.23	..Less than \$3 00
\$3 00- \$3 49.....	.....	7	1	15	.....	10	2	6	4	58	.22	1.68	....\$3 00- 3 49
3 50- 3 99.....	.....	12	1	14	.....	8	4	13	9	83	.71	3.87	.....3 50- 3 99
4 00- 4 49.....	1	19	7	34	6	9	11	21	37	198	2.34	8.82	.....4 00- 4 49
4 50- 4 99.....	.....	13	.....	81	5	13	7	29	25	284	3.44	16.05	.....4 50- 4 99
5 00- 5 49.....	2	60	10	135	12	24	24	56	97	540	7.81	29.7	.....5 00- 5 49
5 50- 5 99.....	5	47	5	41	5	16	15	11	41	318	9.62	37.6	.....5 50- 5 99
6 00- 6 49.....	1	119	9	96	22	29	27	35	130	612	15.3	53.	.....6 00- 6 49
6 50- 6 99.....	1	44	4	44	2	1	6	17	45	166	17.4	57.1	.....6 50- 6 99
7 00- 7 49.....	3	68	8	68	17	12	28	28	111	246	22.8	63.4	.....7 00- 7 49
7 50- 7 99.....	.....	62	4	46	4	3	8	13	45	148	24.6	67.1	.....7 50- 7 99
8 00- 8 99.....	4	167	13	191	27	9	23	36	138	456	30.7	78.6	.....8 00- 8 99
9 00- 9 99.....	8	174	13	165	25	1	18	11	153	388	37.45	88.3	.....9 00- 9 99
10 00-10 99.....	5	141	19	93	12	1	28	3	171	296	45.3	95.6	.....10 00-10 99
11 00-11 99.....	9	28	8	23	8	.....	15	.....	116	72	50.4	97.4	.....11 00-11 99
12 00-12 99.....	7	13	15	17	3	.....	8	.....	190	65	58.9	99.1	.....12 00-12 99
13 00-13 99.....	2	1	3	2	1	.....	6	.....	142	12	65.2	99.5	.....13 00-13 99
14 00-14 99.....	1	.....	3	1	.....	.....	.....	.....	117	6	70.4	99.6	.....14 00-14 99
15 00-15 99.....	2	1	9	2	1	.....	3	.....	178	6	78.5	99.8	.....15 00-15 99
16 00-17 99.....	.....	.....	1	1	1	.....	1	1	190	6	86.9	99.93	.....16 00-17 99
18 00-19 99.....	1	.....	1	.....	.....	.....	.....	.....	107	1	91.6	99.95	.....18 00-19 99
20 00-24 99.....	.....	.....	1	.....	.....	.....	1	.....	129	1	97.4	99.98	.....20 00-24 99
25 00-29 99.....	.....	.....	.....	.....	.....	.....	.....	.....	34	1	99.	100.	.....25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	.....	.....	1	.....	18	.....	99.8	.....	.....30 00-34 99
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	100	.....	.....35 00-39 99
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....40 00 and over
Total.....	52	978	135	1,071	151	138	237	280	2,234	3,972	.....	.....	Total

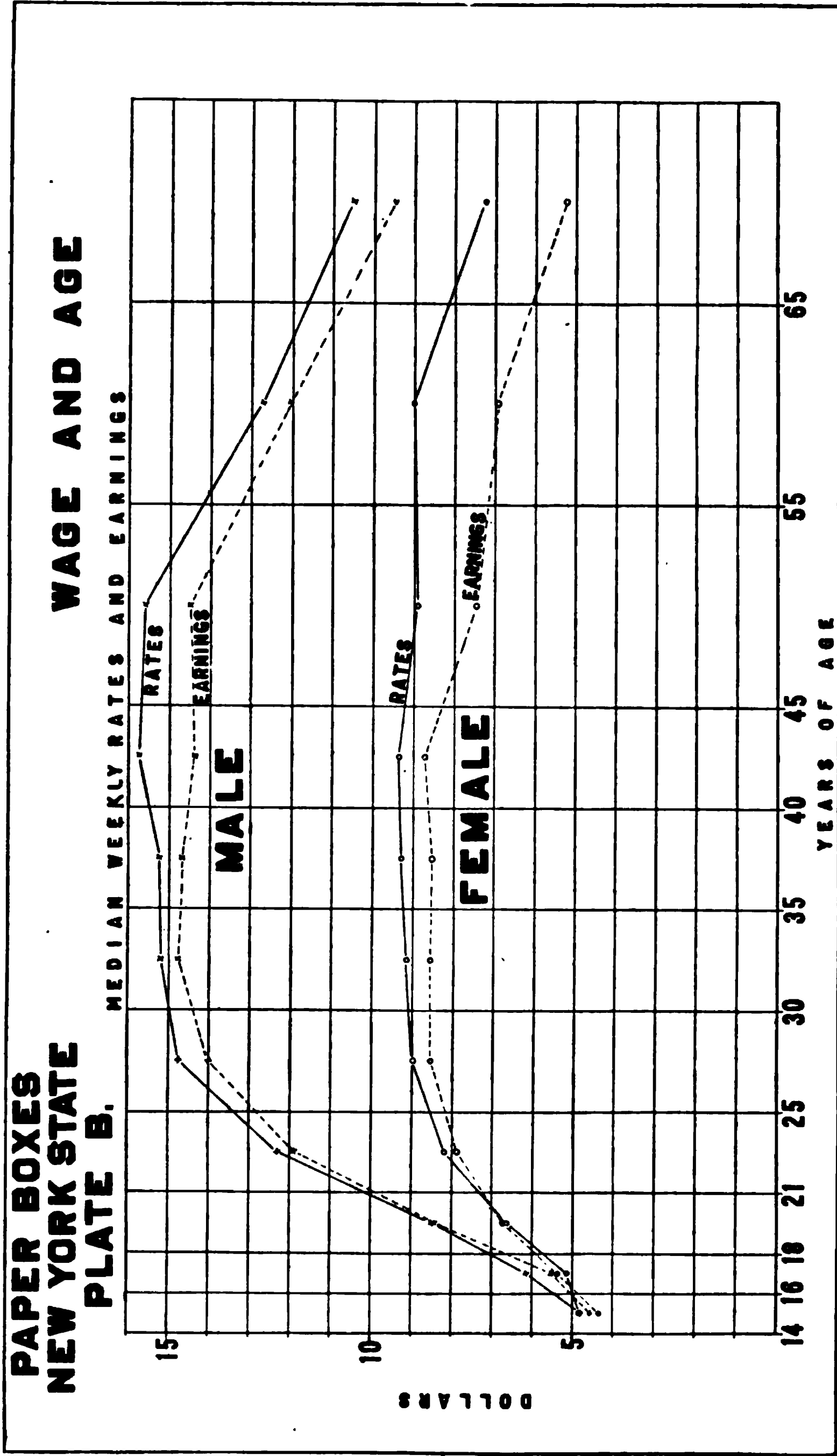


As before remarked these rates vary greatly according to the character of the work. Location is evidently an important factor when time in transit and carfare to work have to be reckoned in calculating weekly earnings. But even within the same immediate locality there are wide divergencies in rates paid for similar work. For instance, one Brooklyn factory pays its cutters \$10 to \$15; another \$15 to \$20. The product in both instances is of the same class. These discrepancies are found throughout the trade. Sometimes steadiness of work, type of management or character of employees will help explain the differences. In other cases they appear to be due to relative knowledge and skill in bargaining on the part of employer and employee. Even those who do the same work in a shop are sometimes on a different scale of wages.

Difference in age sometimes accounts for such variations. Table VIII and the accompanying graph (Plate B) show the rise and fall of earning power with advancing years for all factory workers.

TABLE VIII
MEDIAN WEEKLY RATES AND EARNINGS OF FACTORY WORKERS, BY AGE AND
SEX — NEW YORK STATE

AGE	MALE		FEMALE	
	Rates	Earnings	Rates	Earnings
14-15.....	\$4 78	\$4 56	\$4 80	\$4 35
16-17.....	6 14	5 54	5 11	5 39
18-20.....	8 46	8 41	6 63	6 72
21-24.....	12 30	11 88	8 17	7 87
25-29.....	14 73	14 01	8 98	8 54
30-34.....	15 17	14 75	9 14	8 55
35-39.....	15 21	14 69	9 28	8 51
40-44.....	15 73	14 38	9 35	8 71
45-54.....	15 60	14 50	8 90	7 48
55-64.....	12 72	12 05	9 00	6 94
65 and over.....	10 50	9 50	7 25	5 25



It will be noticed that both men and women reach the top of their earning capacity between 40 and 45 years. It must be remembered, however, that many of those who remain in the trade so long are apt to be the better operatives who find it profitable to use acquired skill. In general, we may say that the majority of boys under 18 are hired for less than \$6 a week; the majority of girls of the same age for less than \$5.50; most women operatives over 18 fall below \$8; and the majority of men over 21 years are rated under \$14.

ACTUAL EARNINGS

The weekly earnings of all employees in box factories in New York City were secured in the manner already indicated, for a week in November, 1913, and those for persons in up-state establishments, for a week in May or June, 1914. This was at a season when the industry in the metropolis had recovered from the summer depression and was again busy with the briskness preceding the Christmas holidays. Table IX shows in detail the earnings of factory employees according to occupation and sex.

A comparison of these data with those presented in Table VII shows that rates quoted are as a rule above earnings received. For instance, less than 10 per cent of all male employees for whom rates were quoted were supposed to receive less than \$6 a week. As a matter of fact, during the week for which we took earnings, more than 13 per cent of the men and boys for whom we have returns actually got less than this amount in their pay envelopes. In the case of girls and women, the rates of 16 per cent were below \$5, the weekly earnings of 22 per cent were less.

More than 2,900 women, or 56 per cent of all over 18 years of age in the shops, earned less than \$8 for a week's work. Nine hundred and fifty-one under 18, or 44 per cent of those below this age, earned less than \$5. Four hundred and fifty men operatives, or 23 per cent of the adult males, earned less than \$10 in a week. Nearly half of all male minors received less than \$7.*

* See Statistical Appendix, Table No. 107

TABLE IX.

ACTUAL WEEKLY EARNINGS, BY OCCUPATION AND SEX. NUMBER AND PER CENT OF FACTORY WORKERS -- NEW YORK STATE

[illegible]

TABLE IX.
ACTUAL WEEKLY EARNINGS, BY OCCUPATION AND SEX. NUMBER AND PER CENT OF FACTORY WORKERS — NEW YORK STATE (concluded)

ACTUAL WEEKLY EARNINGS IN DOLLARS	OCCUPATION										ACTUAL WEEKLY EARNINGS IN DOLLARS		
	TABLE WORK		CLOSING AND TYING		FLOOR WORK		NOT REPORTED		TOTAL				
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			
Less than \$3 00.....	4	60	6	20	7	32	1	.....	38	231	1.32	3.12	Less than \$3 00
\$3 00-\$3 49.....	5	65	2	23	7	16	1	2	27	219	2.25	6.1	\$3 00-\$3 49
3 50- 3 99.....	2	86	5	14	8	21	1	3	26	266	3.15	9.7	3 50- 3 99
4 00- 4 49.....	6	138	10	21	12	34	1	1	56	428	5.09	14.15	4 00- 4 49
4 50- 4 99.....	5	154	7	30	8	31	1	6	49	493	6.79	22.18	4 50- 4 99
5 00- 5 49.....	8	198	17	28	29	46	2	9	103	716	10.7	31.85	5 00- 5 49
5 50- 5 99.....	9	162	7	38	13	15	.....	4	79	569	13.1	39.6	5 50- 5 99
6 00- 6 49.....	10	184	20	28	23	25	3	3	130	662	17.63	48.6	6 00- 6 49
6 50- 6 99.....	6	154	7	18	12	19	1	2	76	435	20.24	55.5	6 50- 6 99
7 00- 7 49.....	17	191	10	14	21	29	1	1	112	508	24.1	61.3	7 00- 7 49
7 50- 7 99.....	9	164	10	15	10	12	3	2	81	390	26.9	66.7	7 50- 7 99
8 00- 8 99.....	26	383	32	15	31	16	2	4	207	824	34.08	77.8	8 00- 8 99
9 00- 9 99.....	25	309	23	14	25	8	.....	5	212	672	41.4	87.	9 00- 9 99
10 00-10 99.....	29	179	12	6	31	6	7	1	214	449	48.8	93.	10 00-10 99
11 00-11 99.....	23	90	9	5	17	1	4	.....	180	236	55.	96.	11 00-11 99
12 00-12 99.....	27	57	6	2	9	.....	3	1	211	172	62.4	98.5	12 00-12 99
13 00-13 99.....	13	13	2	.....	7	.....	2	1	173	56	68.4	99.2	13 00-13 99
14 00-14 99.....	17	10	1	.....	6	.....	.....	.....	147	29	73.5	99.6	14 00-14 99
15 00-15 99.....	15	2	2	.....	2	.....	4	.....	173	11	79.4	99.8	15 00-15 99
16 00-17 99.....	19	4	1	.....	3	1	.....	.....	232	17	87.5	99.93	16 00-17 99
18 00-19 99.....	15	2	.....	.....	.....	.....	.....	.....	139	3	92.4	99.96	18 00-19 99
20 00-24 99.....	21	1	.....	.....	1	.....	.....	.....	157	2	97.8	99.98	20 00-24 99
25 00-29 99.....	5	.....	.....	.....	.....	.....	.....	.....	37	1	99.7	100.	25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	1	.....	.....	.....	19	.....	99.	.....	30 00-34 99
35 00-39 99.....	2	.....	.....	.....	.....	.....	.....	.....	8	.....	100.	.....	35 00-39 99
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Not reported.....	.....	15	.....	2	9	44	5	.....	34	67	.....	.....	Not reported
Total.....	318	2,621	188	293	292	356	42	45	2,920	7,456	.....	.....	Total

DAYS WORKED

For both time and piece workers, the time made establishes the weekly earnings. Table X shows the days worked in a week by 7,685 employees.

TABLE X
DAYS WORKED IN ONE YEAR
NUMBER AND PER CENT OF FACTORY WORKERS — NEW YORK STATE

	TOTAL		NUMBER OF PERSONS WORKING GIVEN NUMBER OF DAYS								Average number of days per person
	Persons	Days	Less than 1	1	2	3	4	5	6	7	
Male.....	2,248	13,009	1	6	23	20	50	228	1,884	36	5.77
Female.....	5,437	30,818	3	24	56	85	211	809	4,208	41	5.68
Total..	7,685	43,827	4	30	79	105	261	1,037	6,092	77	5.72
Per cent of all workers.....			.....	0.4	1.0	1.4	3.4	13.5	79.3	1.0	.....

It will be noted that while 82 per cent of the males and 78 per cent of the females worked a full week, nearly 20 per cent of all operatives lost a day or more. It is true that in New York City a holiday season fell within the weeks covered by this investigation, but payrolls including holidays were avoided whenever possible. It should also be remarked that 76 persons in that city worked 7 days in a week. Women from 10 firms there report Sunday work. This is pretty good evidence that trade was brisk.

HOURS

An attempt was made to ascertain the effect of the 54-hour law that has been a part of the labor code since October 1, 1912. That overtime has not ceased because of the legal prohibition has been made evident from the records of the firms, badly defective as they are in general regarding work hours. Little evidence could be obtained that there had been any general reduction of weekly rates as a direct result of the law. A more decided and widespread effect of the law has been the encouraging of the extension of piece work, and in some cases it has led to the further use of machinery in order to maintain the rate of production. There was agreement on the part of the manufacturers that the demand for many lines of paper boxes was so irregular and, worst of all, of an urgent nature, that it was difficult if not impossible to so organize a force, on the basis of weekly rates and fixed hours, as to work continuously and regularly.

Practically all factories run from 50 to 60 hours a week, centering at about 54 on account of the female help. Only one plant, out of 239 where time of operation was noted, ordinarily ran over 60 hours. But changes in the season cause wide variation from the regular schedule.

With six exceptions, the usual working day for men is from 9 to 10 hours; for women, 8½ to 9½ or 10 hours; and for children, 8 hours. Out of 226 firms reporting, 152 gave a short day varying from 4 to 8 hours. The longer regular working day for women in New York State, outside of New York City, is offset by a short day of from 4 to 5 hours in almost all cases.

The ordinary lunch period in 146 plants is 30 minutes; in 24, it is 45 minutes; and in 62 it is an hour; in 3 cases, over an hour.

The number of persons working a given number of hours a week is shown in the following table. This includes 6,396 persons in 234 plants. For many piece workers the hours are not recorded.

TABLE XI
HOURS WORKED PER WEEK
NUMBER AND PER CENT OF FACTORY WORKERS, BY AGE AND SEX — NEW YORK STATE

	AGE									
	14-15		16-17		18 and over		Total		Per cent of	
	Male	Female	Male	Female	Male	Female	Male	Female	All male	All female
Total.....	56	340	219	1,134	1,801	2,846	2,076	4,320	100.	100.
<i>Hours</i>										
48 and under.....	49	303	42	292	245	734	336	1,329	16.2	30.8
Over 48 to 54.....	4	30	110	767	544	1,025	658	2,722	31.7	63.
Over 54 to 60.....	3	2	56	60	844	147	903	209	43.5	4.8
Over 60 to 66.....	.....	5	8	15	125	37	133	57	6.4	1.3
Over 66 to 72.....	.....	.....	3	.....	42	3	45	3	2.2	0.1
Over 72.....	.....	.....	.....	.....	1	.....	1	.....	0.1	.....

It will be seen that, according to these figures, 44 children (11 per cent of all those under 16), 67 youths (31 per cent of all males 16 to 18) and 262 women and girls (6½ per cent of all females over 16) worked more than the 48 or 54 hours allowed by law. All but six of the cases of overtime work were reported from New York City during the busy fall season.

The actual number of hours overtime is shown in Table XII. To obtain these figures, the legal hours for women and minors and the regular hours for men were used. The data cover 193 plants employing 5,641 female and 2,259 male factory workers.

TABLE XII
PERSONS WORKING OVERTIME
NUMBER AND PER CENT OF WORKERS NOTED — NEW YORK STATE

	HOURS OVERTIME												
	Total persons	Less than 1	1	2	3	4	5	6	7-9	10-12	13-15	16-18	19 and over
Male.....	393	18	51	62	22	68	20	39	65	28	10	8	2
Female.....	371	33	58	89	61	33	20	10	48	10	8	1	.....
Both.....	764	51	109	151	83	101	40	49	113	38	18	9	2
Percent of all	100	6.7	14.3	19.8	10.9	13.1	5.2	6.4	14.8	5	2.3	1.2	0.3

According to these figures, about 3,340 hours overtime were worked by 764 persons in one week. The males averaged over 5 hours a week; the females 3.6 hours.

SEASONAL FLUCTUATIONS

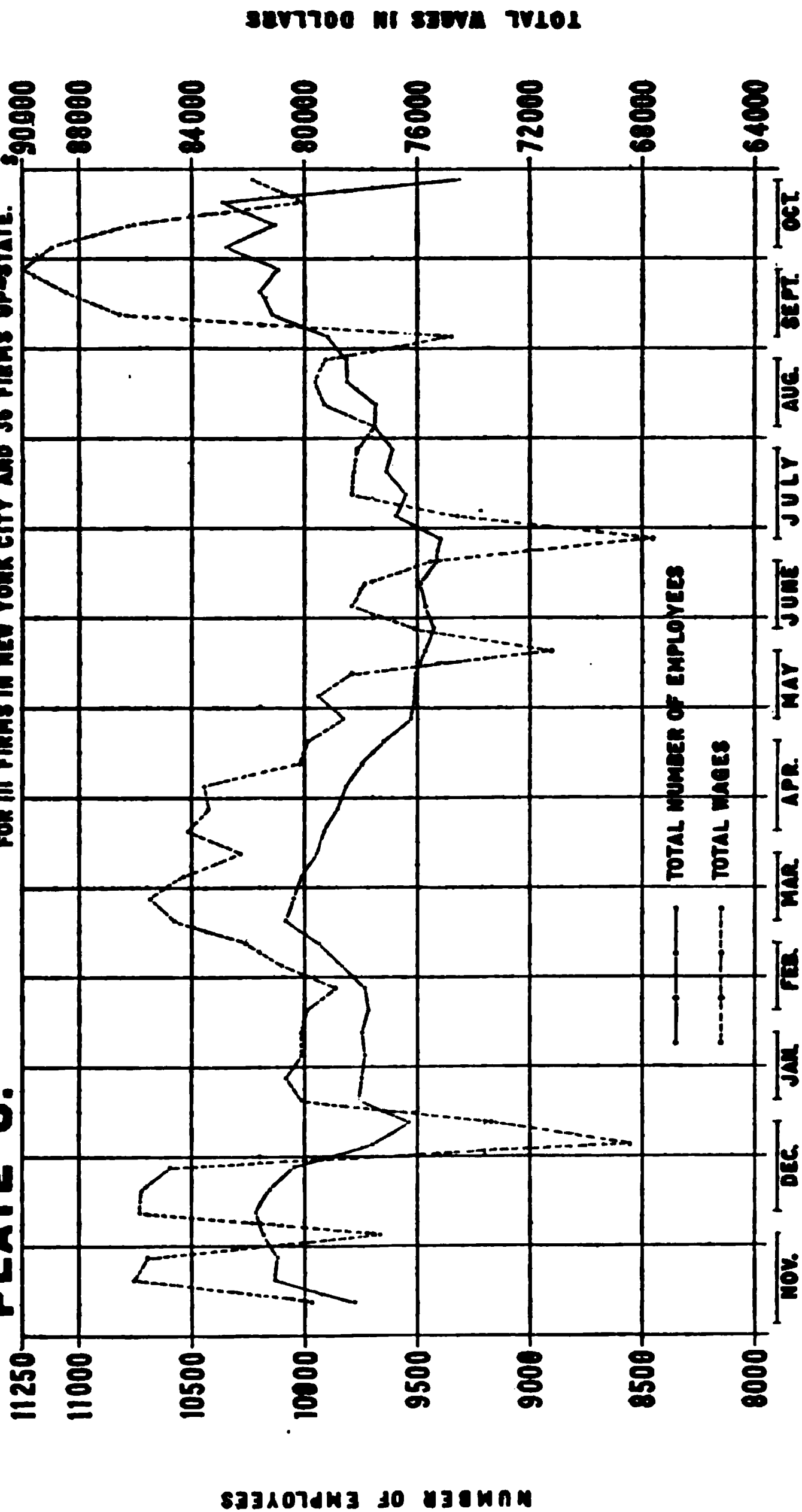
The busy season for the trade as a whole comprises the five months beginning about Labor Day. The two or three months preceding are dull. An important point to remember is that, as the workers are largely on a piece basis, there is no great difference in the number of employees, but the differences in earnings reflect trade conditions. The general practice is to retain as nearly as possible the full force during the slack season, in order to have the force ready not only when the busy season comes, but also for the spasmodic orders that may be obtained. Very few of the establishments make goods for stock. The cost and difficulty of handling and storage discourages even those who make stable lines from attempting to make goods ahead. In the busy season recourse is generally had to overtime work. During the year taken for this study there was practically no prosperous factory that did not to some extent work overtime. Some factories were in operation all the seven days of the week.

The accompanying chart (Plate C) shows the fluctuation in number of employees and total wages paid throughout a year. The solid curve for all employees is plotted on a scale of 500 persons to every horizontal line, as shown on the left of the diagram. We probably cannot trust the data for the first and last few weeks, because of some lack of correspondence in all the payroll periods.

**PAPER BOXES
NEW YORK STATE
PLATE C.**

NUMBER OF EMPLOYEES AND TOTAL WAGES

WEEK BY WEEK FOR ONE YEAR COMMENCING NOVEMBER 1, 1912.
FOR 111 FIRMS IN NEW YORK CITY AND 36 FIRMS UP-STATE.



Beginning in the middle of November, 1912, the number of employees in the 147 factories scheduled was over 10,100. It fell to 9,500 after Christmas, but rose again to over 10,000 in March, 1913. From that time there was a steady decline until July, when the lowest number, 9,400, was reached. For the remainder of the year, the curve shows a continuous rise until October, the period of maximum employment, with almost 10,400 persons on the payrolls. Twice, therefore, in the course of the year, there was a distinct displacement of 10 per cent of employees, most of whom, as is generally the case, were the lower paid factory workers.

As this chart is a composite of many lines, as well as of different localities, we cannot explain all its variations. The demand for some goods, such as boxes for standard brands of cigarettes, is remarkably steady. For other kinds, like holiday candy boxes, there is a seasonal market. Easter and the fall clothing trade each call for special supplies. The box business thus follows, or rather precedes, the high season for goods that are put up in pasteboard.

The broken line shows the total amount of wages paid week by week to all employees. The striking feature of this curve is the great degree of fluctuation with seasons and holidays. However, because of the extreme diversification of the industry, the curve gives the impression that earnings are much more regular than is actually the case. Thus, both the numbers employed and amounts paid in wages are much more steady in the up-state factories than in New York City. These constitute about one-third of the total in this study. The New York City establishments are much more closely related to the seasonal industries.

To quote from the preliminary report on the industry in New York City: "These oscillations [in wages] involving from \$10,000 to \$15,000 within a brief time must seriously affect the weekly incomes of about 6,300 persons. The piece workers especially are well paid in a busy season, but fall far below their average at a slack time. For example, the average wage of all employees for the third week was \$8.66; for the tenth, it was \$7.08, a difference of \$1.58. In the twenty-third week

the average rose again to \$8.76; fell off \$1.35 in the next three months; and then rose again to \$8.89. Obviously for a worker with an average wage of \$8.30, a 10 per cent or 15 per cent reduction is no slight matter. It must make a standard of living either pretty simple or very elastic. For 194 women operatives questioned as to seasonal wages, \$7.36 was found to be the average ordinary week's pay; but in rush season it was \$8.13 and in dull periods \$5.68. That is a variation from 10 per cent above the usual earnings to 23 per cent below." *

SHIFTING

The fluctuation of the box trade as a whole gives a very inadequate idea of the amount of shifting from one establishment to another. We were unable to follow all employees for an entire year within the industry, because of the enormous task of tracing names and addresses. The following table shows the length of time 2,295 persons stayed in nine New York City plants during twelve months preceding the investigation. These places ordinarily employed about 792 hands.

The accompanying graph shows the same data in a form more easily appreciated by the eye. It is plain that women were more rapid in their transit than men. Both sexes appear to be divided into two well marked groups. About one-half stayed less than two months; about one-sixth stayed practically the whole year. The others straggled in and out at such a rate that several times as many people as the plants ordinarily employ were added and dropped during twelve months. The less skilled and lowest paid workers shift most rapidly.

* See Third Report of the Factory Commission, pp. 130-131.

TABLE XIII
WEEKS WORKED IN ONE YEAR
NUMBER AND PER CENT OF FACTORY WORKERS WORKING SPECIFIED NUMBER OF WEEKS IN
ONE YEAR — NEW YORK CITY

	Male	Female	Both	Cumu- lative per cent of all
Total.....	633	1,662	2,295	.....
WEEKS				
Less than 1.....	86	262	348	15.2
1 to 4.....	134	432	566	29.9
5 to 8.....	73	202	275	51.9
9 to 12.....	56	117	173	59.5
13 to 16.....	31	89	120	64.7
17 to 20.....	24	63	87	68.5
21 to 24.....	20	46	66	71.4
25 to 28.....	24	37	61	74.1
29 to 32.....	14	36	50	76.2
33 to 36.....	14	32	46	78.3
37 to 40.....	18	23	41	80.0
41 to 44.....	5	29	34	81.5
45 to 48.....	12	38	50	83.7
49 to 52.....	122	256	378	100.0

PAPER BOXES.

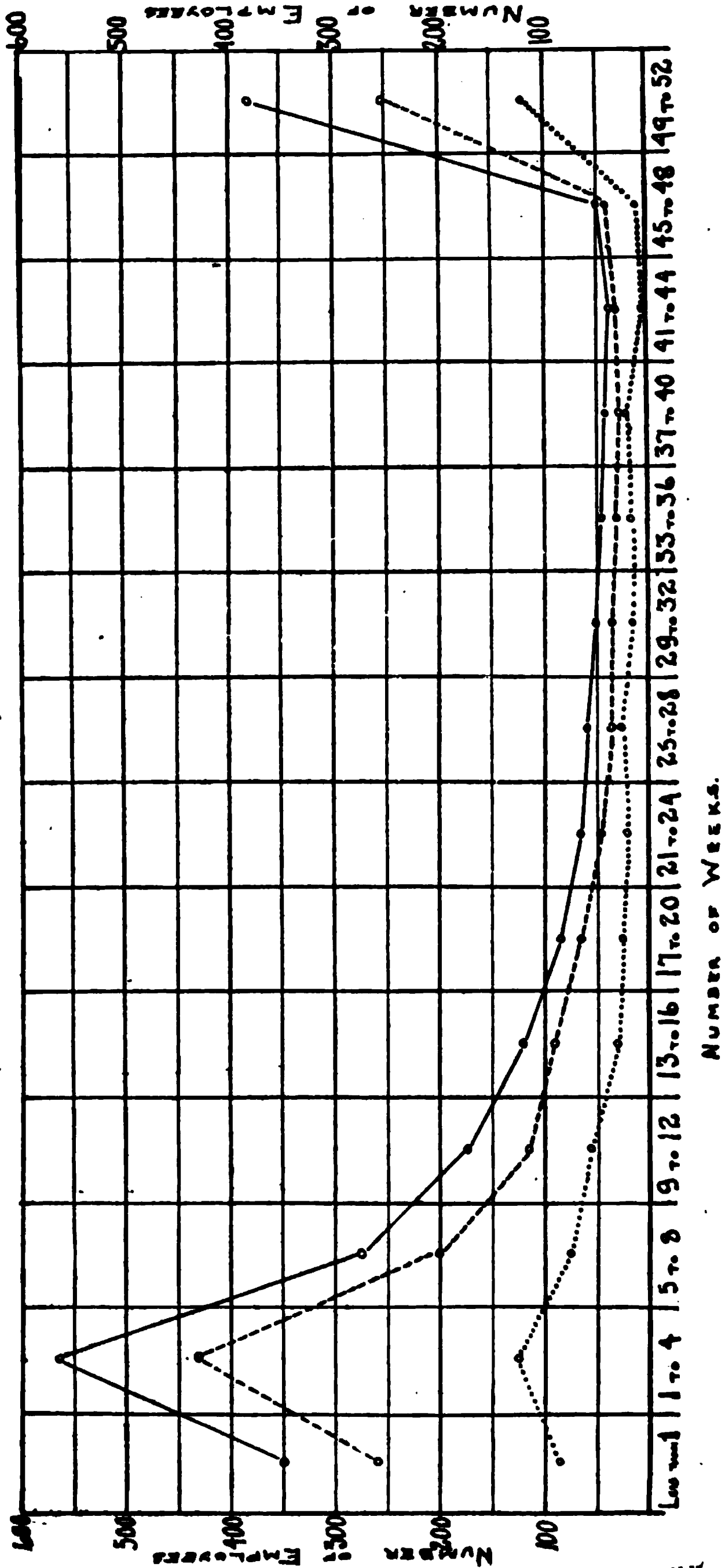
NEW YORK CITY.

PLATE D.

REGULARITY OF EMPLOYMENT.

NUMBER OF EMPLOYEES WORKING
SPECIFIED NUMBER OF WEEKS IN ONE YEAR.
(EMPLOYEES OF 9 ESTABLISHMENTS.)

MALES.....
FEMALES.....
TOTAL.....



The rapid taking on and laying off of help is shown by the accompanying table which gives for the same nine factories the number of additions to the working force and subtractions therefrom during twelve months.

TABLE XIV
ADDITIONS AND SUBTRACTIONS IN WORKING FORCE, FOR ONE YEAR —NEW YORK CITY

FIRM	Average number of employees	ADDED DURING YEAR		DROPPED DURING YEAR		PERSONS COUNTED MORE THAN ONCE	
		Male	Female	Male	Female	Male	Female
A.....	281	276	910	261	843	15	52
B.....	61	2	6	.....	.....	.....	.....
C.....	43	4	13	7	14	.....	.....
D.....	11	12	24	14	25	2	2
E.....	186	57	143	58	150	1	11
F.....	68	7	38	8	37	.....	2
G.....	22	22	13	22	12	6	1
H.....	56	14	50	16	30	.....	3
I.....	64	20	46	23	51	3	.....
Totals...	792	414	1,243	409	1,162	27	71
Per cent of average force	100%	209%		198%		12%	

It will be seen from this table that about twice as many persons flowed through the plant as were retained. That means in order to maintain an average working force of less than 800 persons, the services of more than 2,300 people were used, two-thirds of whom were only temporarily employed. Nearly 100 persons were taken on and laid off more than once during the year.

TIME LOST

This shifting and laying off entails loss of time between jobs for the floaters. But even the steady workers are affected by slack seasons, sickness and other reasons, that cause them to stay out or change employers. Among 229 women operatives interviewed in New York City, it was found that on the average nearly five weeks apiece had been lost during the previous year, in amounts varying from less than one day to ten months. Three weeks were accounted for by industrial reasons and two by personal causes. For the 115 who were out from slack work, 19 working days, or a little over 3 weeks, was the average; and for the 54 altogether out of a job, 26 working days, or something over 4 weeks, was the average. Sickness in 92 cases aggregated 1,837 days loss.

Vacations with pay among the operatives are very rare. Thirty-three women out of 283 reported a week or two in the dull season. Holidays vary with the character of the establishment. Native firms keep most important legal days; Jewish workers observe their religious celebrations. It is plain from Plate C that pay envelopes do not benefit from cessation of work, although tired bodies may.

ANNUAL EARNINGS

With this understanding of trade conditions, we may now turn to the problem of annual earnings. It must be remembered that the time required to follow a great number of workers through fifty-two weeks was not at the disposal of the Commission; and if it had been, the books in many places did not permit it. Pay-rolls were sometimes kept in the boss's-pocket memoranda. It will be clear from this remark that the places where adequate accounts are kept are generally the better plants, and usually pay a fair scale. Moreover, as has before been noted, the operatives who stay ten months or more with the firm are, as a rule, the more skilled and reliable hands. So we may expect to find the annual earnings quoted above the general level for the trade.

Table XV shows annual earnings for 446 persons employed with 15 representative firms for 43 weeks or more during the previous 12 months. (See pp. 258-9.)

It will be noted that the numbers are not very large, especially in the low-skilled lines. We have also used cumulative percentages to make the comparison of proportional parts easy.

The returns for males are scattering, centering below \$350 for less skilled occupations, below \$550 for setters up, below \$650 for ordinary machine operatives, and under \$700 for cutters. For females, covering and table work outweigh all other occupations, and fix annual receipts for over three-fourths of the women under \$450. The median annual receipt for women is in the \$350 group.

Upon this basis, average earnings for weeks actually worked during the year are shown in Table XVI. According to this, over half the males receive less than \$11, and the majority of females under \$6 a week. (See pp. 260-1.)

TABLE XV
ACTUAL ANNUAL EARNINGS, BY OCCUPATION AND SEX
NUMBER AND PER CENT OF FACTORY WORKERS WORKING 43 WEEKS OR MORE — NEW YORK STATE

ACTUAL ANNUAL EARNINGS IN DOLLARS	OCCUPATION										ACTUAL ANNUAL EARNINGS IN DOLLARS	
	FOREMEN AND FOREWOMEN		CUTTERS		SETTERS-UP		GENERAL MACHINE WORK		GLUE TABLE WORK	TURNERS-IN		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Male		Female
Less than \$200.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	Less than \$200
\$200- \$249.....	.....	.....	.....	.....	1	3	.....	.....	.....	1	11	\$200- 249
250- 299.....	.....	.....	3	.....	.....	1	.....	1	.....	3	11	250- 299
300- 349.....	.....	.....	2	.....	2	.....	.....	1	.....	1	2	300- 349
350- 399.....	.....	.....	1	.....	2	2	.....	.....	1	.....	.....	350- 399
400- 449.....	.....	1	2	.....	2	.....	.....	.....	.....	.....	1	400- 449
450- 499.....	.....	.....	3	1	3	.....	1	.....	.....	.....	.....	450- 499
500- 549.....	.....	2	3	.....	2	1	1	.....	.....	.....	.....	500- 549
550- 599.....	1	1	6	.....	1	1	1	1	.....	.....	.....	550- 599
600- 649.....	.....	.....	4	.....	4	1	1	.....	2	.....	.....	600- 649
650- 699.....	1	.....	4	.....	1	1	.....	.....	.....	.....	.....	650- 699
700- 749.....	1	.....	3	.....	2	.....	.....	.....	.....	.....	.....	700- 749
750- 799.....	.....	.....	8	.....	2	.....	.....	.....	.....	.....	.....	750- 799
800- 899.....	3	.....	6	.....	.....	.....	1	.....	.....	.....	.....	800- 899
900- 999.....	1	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	900- 999
1,000-1,099.....	4	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	1,000-1,099
1,100-1,199.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,100-1,199
1,200-1,299.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,200-1,299
1,300-1,399.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,300-1,399
1,400-1,499.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,400-1,499
1,500-1,599.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,500-1,599
1,600-1,799.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,600-1,799
1,800-1,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,800-1,999
2,000-2,499.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000-2,499
2,500-2,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,500-2,999
3,000 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,000 and over
Total.....	16	4	53	1	22	10	5	3	3	5	30	Total

TABLE XV
ACTUAL ANNUAL EARNINGS, BY OCCUPATION AND SEX
NUMBER AND PER CENT OF FACTORY WORKERS WORKING 43 WEEKS OR MORE — NEW YORK STATE (concluded)

ACTUAL ANNUAL EARNINGS IN DOLLARS	OCCUPATION												ACTUAL ANNUAL EARNINGS IN DOLLARS
	STRIPPERS AND TOP LABELERS		TABLE WORK		CLOSING AND TYING		FLOOR WORK		TOTAL		CUMULATIVE PER CENT OF TOTAL		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$200.....	.....	2	.....	1	2	.....	1	.....	2	11	1.3	3.7	Less than \$200
\$200- \$249.....	.....	6	.....	6	.....	.....	2	.....	2	28	2.7	13.2	200- 249
250- 299.....	1	18	.....	17	.....	.....	.....	.....	11	48	10.2	29.3	250- 299
300- 349.....	1	12	.....	26	.....	.....	.....	1	8	41	15.4	43	300- 349
350- 399.....	.....	21	.....	34	.....	.....	.....	1	6	60	19.5	63.2	350- 399
400- 449.....	1	22	.....	20	.....	.....	.....	1	7	44	24.1	78	400- 449
450- 499.....	6	12	.....	21	.....	.....	.....	1	15	34	34.2	89.3	450- 499
500- 549.....	1	5	.....	10	.....	.....	.....	1	9	18	40.2	95.7	500- 549
550- 599.....	1	3	.....	.....	.....	.....	.....	.....	10	6	52.2	97.5	550- 599
600- 649.....	4	2	.....	.....	.....	.....	.....	.....	18	3	59	98.5	600- 649
650- 699.....	1	1	.....	.....	.....	.....	.....	.....	7	2	64	99.2	650- 699
700- 749.....	1	2	.....	.....	.....	.....	.....	.....	9	2	70	100	700- 749
750- 799.....	2	.....	.....	.....	.....	.....	.....	.....	13	.....	78.5	.....	750- 799
800- 899.....	1	.....	.....	.....	.....	.....	.....	.....	11	.....	86	.....	800- 899
900- 999.....	3	.....	.....	.....	.....	.....	.....	.....	7	.....	90.5	.....	900- 999
1,000-1,099.....	.....	.....	.....	.....	.....	.....	.....	.....	9	.....	96.8	.....	1,000-1,099
1,100-1,199.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	97.5	.....	1,100-1,199
1,200-1,299.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	98.7	.....	1,200-1,299
1,300-1,399.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,300-1,399
1,400-1,499.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,400-1,499
1,500-1,599.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	99.4	.....	1,500-1,599
1,600-1,799.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	100	.....	1,600-1,799
1,800-1,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,800-1,999
2,000-2,499.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,000-2,499
2,500-2,999.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,500-2,999
3,000 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,000 and over
Total.....	23	106	5	135	12	5	5	3	149	297	.....	.....	Total

TABLE XVI
AVERAGE ACTUAL WEEKLY EARNINGS, BY OCCUPATION AND SEX
NUMBER AND PER CENT OF FACTORY WORKERS — NEW YORK STATE

AVERAGE ACTUAL WEEKLY EARNINGS IN DOLLARS	OCCUPATION												AVERAGE ACTUAL WEEKLY EARNINGS IN DOLLARS
	FOREMEN AND FOREWOMEN		CUTTERS		SETTERS-UP		GENERAL MACHINE WORK		GLUE TABLE WORK		TURNERS-IN		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	9	Less than \$3 00.....
\$3 00-\$3 49.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	17	\$3 00- 3 49.....
3 50- 3 99.....	.....	.....	1	1	1	1	.....	.....	.....	.....	1	22	3 50- 3 99.....
4 00- 4 49.....	.....	.....	3	.....	.....	2	.....	.....	.....	.....	.....	15	4 00- 4 49.....
4 50- 4 99.....	.....	.....	.....	.....	2	2	.....	1	.....	.....	4	20	4 50- 4 99.....
5 00- 5 49.....	.....	.....	2	.....	.....	1	.....	.....	.....	.....	3	18	5 00- 5 49.....
5 50- 5 99.....	.....	.....	3	.....	1	1	.....	1	.....	.....	1	7	5 50- 5 99.....
6 00- 6 49.....	.....	.....	6	1	2	1	.....	.....	.....	.....	.....	2	6 00- 6 49.....
6 50- 6 99.....	.....	.....	5	.....	2	.....	.....	.....	.....	.....	.....	.....	6 50- 6 99.....
7 00- 7 49.....	.....	.....	1	.....	1	3	.....	1	.....	.....	.....	.....	7 00- 7 49.....
7 50- 7 99.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	1	7 50- 7 99.....
8 00- 8 99.....	.....	1	12	.....	5	1	.....	2	.....	.....	.....	.....	8 00- 8 99.....
9 00- 9 99.....	.....	1	6	1	6	.....	1	.....	.....	.....	.....	.....	9 00- 9 99.....
10 00-10 99.....	.....	1	3	.....	2	2	1	.....	4	.....	.....	.....	10 00-10 99.....
11 00-11 99.....	1	.....	8	.....	5	.....	1	1	7	.....	.....	.....	11 00-11 99.....
12 00-12 99.....	.....	1	5	.....	5	2	.....	.....	2	.....	.....	.....	12 00-12 99.....
13 00-13 99.....	.....	.....	6	.....	3	.....	.....	.....	.....	.....	.....	.....	13 00-13 99.....
14 00-14 99.....	.....	.....	9	.....	3	.....	.....	.....	1	.....	.....	.....	14 00-14 99.....
15 00-15 99.....	.....	.....	9	.....	2	.....	2	.....	.....	.....	.....	.....	15 00-15 99.....
16 00-17 99.....	4	.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00-17 99.....
18 00-19 99.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	18 00-19 99.....
20 00-24 99.....	8	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	20 00-24 99.....
25 00-29 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25 00-29 99.....
30 00-34 99.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 00-34 99.....
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35 00-39 99.....
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over.....
Not reported.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not reported.....
Total.....	18	4	97	3	41	19	10	4	17	9	111	Total	

TABLE XVI
AVERAGE ACTUAL WEEKLY EARNINGS, BY OCCUPATION AND SEX
NUMBERS AND PER CENT OF FACTORY WORKERS — NEW YORK STATE (continued)

OCCUPATION													
AVERAGE ACTUAL WEEKLY EARNINGS IN DOLLARS	STRIPPERS AND TOP LABELERS		TABLE WORK		CLOSING AND TYING		FLOOR WORK		TOTAL		CUMULATIVE PER CENT OF TOTAL		AVERAGE ACTUAL WEEKLY EARNINGS IN DOLLARS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00	..	..	..	1	1	8	..	6	1	25	.4	4.6	Less than \$3 00
\$3 00-\$3 49	..	..	..	3	..	4	1	2	..	28	1.15	9.8	\$3 00-\$3 49
3 50-3 99	..	4	..	7	3	1	..	2	..	38	3.46	16.8	3 50-3 99
4 00-4 49	..	10	..	6	2	1	1	1	..	35	5.8	23.3	4 00-4 49
4 50-4 99	..	12	..	13	4	1	..	2	..	52	10.4	33.	4 50-4 99
5 00-5 49	1	17	..	13	5	..	..	..	..	49	15.	42.	5 00-5 49
5 50-5 99	1	18	..	18	1	..	1	..	..	45	18.1	50.4	5 50-5 99
6 00-6 49	1	7	..	19	..	..	..	..	..	30	21.9	56.	6 00-6 49
6 50-6 99	1	7	..	18	3	..	2	..	..	22	27.3	60.	6 50-6 99
7 00-7 49	2	14	..	19	..	..	..	..	4	37	28.9	67.	7 00-7 49
7 50-7 99	..	17	..	28	1	3	..	..	4	49	30.4	76.	7 50-7 99
8 00-8 99	3	27	..	28	1	..	2	..	26	57	40.4	86.8	8 00-8 99
9 00-9 99	4	10	..	28	..	..	..	..	20	40	48.1	94	9 00-9 99
10 00-10 99	3	7	..	10	..	..	1	..	14	20	53.5	97.8	10 00-10 99
11 00-11 99	2	2	..	1	..	..	..	..	25	4	63.1	98.4	11 00-11 99
12 00-12 99	2	2	..	1	1	..	..	..	17	5	69.7	99.3	12 00-12 99
13 00-13 99	1	3	..	..	..	..	..	..	12	2	74.8	99.7	13 00-13 99
14 00-14 99	1	1	..	2	2	..	..	..	18	1	81.2	99.9	14 00-14 99
15 00-15 99	4	1	..	..	..	..	..	..	17	1	87.7	100.	15 00-15 99
16 00-17 99	1	..	..	..	..	..	..	..	15	..	93.5	..	16 00-17 99
18 00-19 99	1	..	..	..	..	..	..	..	4	..	95.	..	18 00-19 99
20 00-24 99	..	..	..	..	..	..	..	..	12	..	99.3	..	20 00-24 99
25 00-29 99	..	..	..	..	..	..	..	..	..	..	..	..	25 00-29 99
30 00-34 99	..	..	..	..	..	..	..	..	2	..	100.	..	30 00-34 99
35 00-39 99	..	..	..	..	..	..	..	..	..	..	..	..	35 00-39 99
40 00 and over	..	..	..	..	..	..	..	..	..	..	..	..	40 00 and over
Not reported	..	..	..	..	..	..	..	..	..	..	..	..	Not reported
Total	28	159	8	309	24	18	9	13	261	540	..	..	Total

EXPERIENCE

Table XVII shows for all employees, length of experience in the trade and with the firm where enumerated. Our query as to how long these persons had been at work for wages brought out the response that practically all had begun as soon as the law allowed and had been at it with few interruptions ever since. But as to the box industry, our figures show a lagging, which indicates that other trades had claimed some years. Among 352 women investigated, who had worked from less than one year to more than 35, we found that 123 had been in some other line; 32 had been in two others; and 16 had been in three or four. So the box maker is not necessarily a specialist by training.

TABLE XVII
YEARS OF EXPERIENCE (MEDIAN), BY AGE—ALL FACTORY WORKERS—NEW YORK STATE

AGE	YEARS IN TRADE				YEARS WITH FIRM			
	Male		Female		Male		Female	
	Years	Months	Years	Months	Years	Months	Years	Months
14-15.....	.....	10.3	.....	8.	.....	9.4	.....	7.5
16-17.....	.....	10.5	1	0.9	.....	9.1	.....	10.
18-20.....	1	11.2	3	1.1	.....	11.7	1	10.6
21-24.....	5	3.5	6	2.2	1	8.3	3	5.7
25-29.....	9	2.2	9	8.6	2	10.	4	11.8
30-34.....	12	11.	13	9.	3	3.2	6	0.4
35-39.....	16	7.5	16	11.8	4	3.4	5	6.8
40-44.....	18	8.	22	1.4	5	9.	8	4.5
45-54.....	25	10.8	21	6.	6	11.	7	4.5
55-64.....	24	2.	27	.....	8	3.	12	6.
65 and over.....	16	3.	17	6.	11	3.	17	6.

Years with the firm, as shown by the last column, are few indeed. This further emphasizes the shifting nature of the force. Little more than 7 per cent of the women workers had been with the firm 10 years or more, and but 20 per cent of the men had remained over five years.

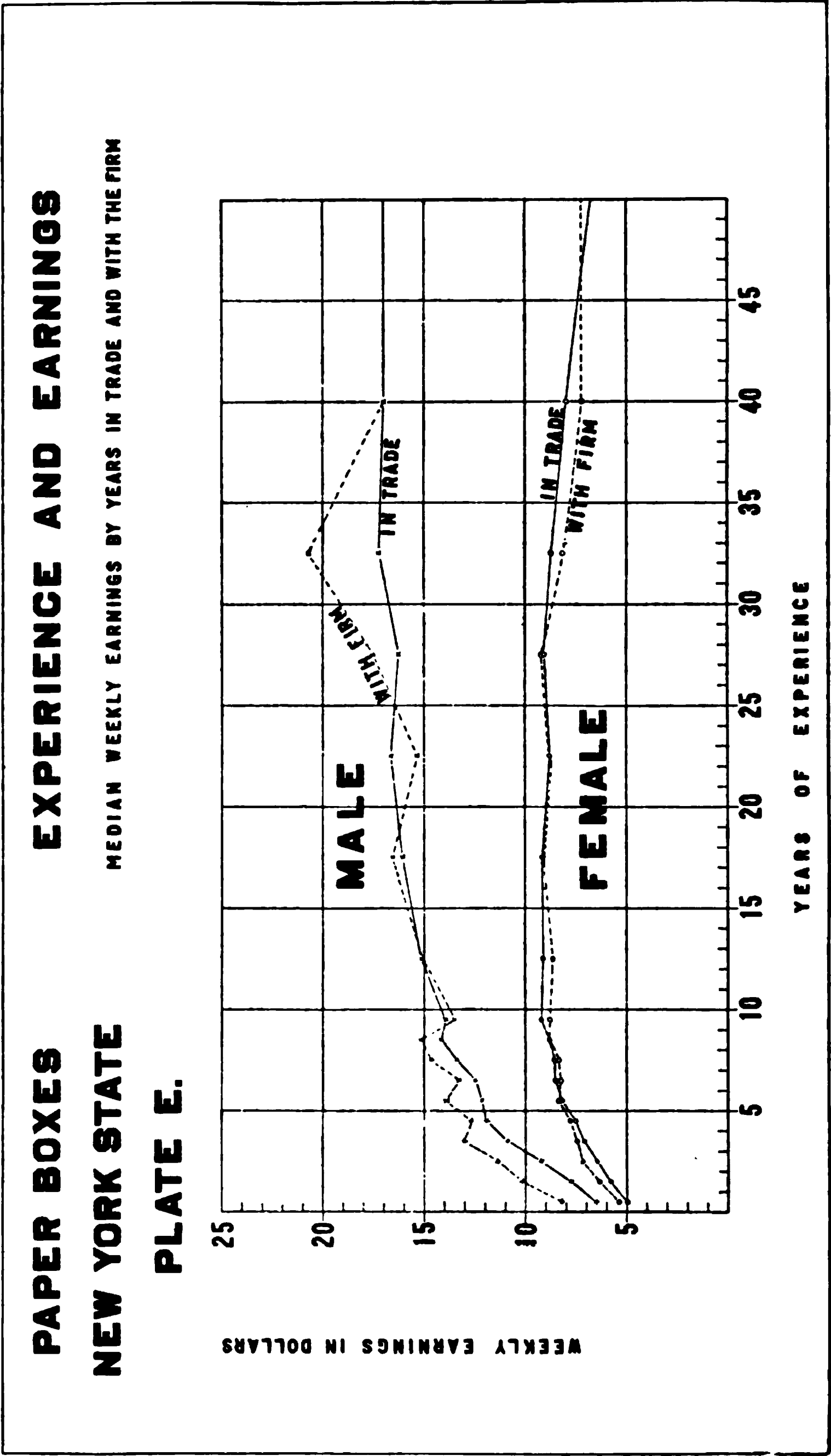
Naturally a worker expects to capitalize such experience in the form of greater earning capacity. Table XVIII shows that for only a short time does a man's work for a year put a dollar a week more into his pay envelope. After 10 years' experience in the business the representative male worker is able to make \$15; and after 30 years, he attains to \$17.24 — the high water mark. Half of the women rise to \$8 after 5 years of work and to \$9 after 9 years. The majority never touch \$10.

TABLE XVIII
EARNINGS AND TRADE EXPERIENCE
NUMBER AND PER CENT OF ALL EMPLOYEES, BY YEARS IN TRADE AND MEDIAN WEEKLY EARNINGS — NEW YORK STATE

YEARS OF EXPERIENCE	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	602	21.1	\$6 50	1,797	24.5	\$4 95
1.....	296	31.5	7 73	911	36.9	5 80
2.....	205	38.2	9 22	837	48.4	6 45
3.....	177	45.	10 88	713	58.1	7 09
4.....	134	49.7	11 92	516	65.2	7 53
5.....	130	54.3	12 18	434	71.1	8 20
6.....	153	59.7	12 48	365	76.1	8 54
7.....	117	63.7	13 39	309	80.3	8 57
8.....	121	67.9	14 16	225	83.4	8 84
9.....	71	70.4	13 95	144	85.4	9 21
10-14.....	340	82.6	15 13	521	92.5	9 12
15-19.....	207	89.6	16 07	239	95.7	9 17
20-24.....	123	93.9	16 65	162	97.9	8 80
25-29.....	76	96.6	16 29	92	99.1	9 10
30-34.....	62	98.7	17 24	40	99.7	8 75
35-44.....	33	99.9	17 00	24	99.9	8 00
45 and over.....	4	100.	17 00	1	100.	6 75
Total	2,851			7,330		

TABLE XIX
EARNINGS AND TERM OF EMPLOYMENT
NUMBER AND PER CENT OF ALL EMPLOYEES, BY YEARS WITH FIRM, AND MEDIAN WEEKLY EARNINGS — NEW YORK STATE

YEARS WITH FIRM	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	1,045	36.4	\$8 17	2,774	37.5	\$5 38
1.....	451	52.1	10 14	1,130	53.	6 32
2.....	300	62.6	11 33	874	64.9	7 18
3.....	216	70.4	13 00	628	73.4	7 46
4.....	143	75.	12 69	431	79.2	7 80
5.....	136	80.	13 93	347	83.9	8 31
6.....	90	83.1	13 25	221	87.	8 28
7.....	80	85.9	14 63	206	89.7	8 38
8.....	58	87.9	15 17	130	91.4	8 81
9.....	36	89.	13 50	94	92.7	8 80
10-14.....	158	94.5	15 08	329	97.1	8 68
15-19.....	59	96.6	16 54	92	98.3	9 19
20-24.....	43	98.1	15 35	67	99.2	8 77
25-29.....	28	99.1	17 50	30	99.6	9 20
30-34.....	22	99.8	20 71	15	99.8	8 17
35-44.....	7	100.	17 00	6	99.9	7 25
45 and over.....	.....	.....	.....	7	100.	7 25
Total	2,872			7,381		



As for sticking to the firm, Table XIX shows how that pays. As compared with the same length of service in the trade, ordinary men who stay in one place get two or three dollars a week more for the first few years; but this difference gradually dwindles to a dollar or less—not much of a premium for steadiness. For women there is little difference. Plate E shows the comparative progress in graphic form.

In considering progress in the trade, the number of lines or occupations worked at may give some idea of the chances of promotion and of the extent of specialization. Of 351 women operatives reporting on this point, 204 (58 per cent) had worked at one line only. Of these, 37 had been in the business 10 years or more. One hundred and twelve had worked at two lines, and 34 had tried their hands at three or four operations.

Table XX shows that 15 per cent of the workers in nine factories in New York City received an advance in wages during the course of a year. For two-thirds of all males raised and for seven-eighths of the girls and women, this amounted to 50 cents or \$1 a week. Other details are shown in the table.

TABLE XX
WAGE INCREASE IN ONE YEAR
NUMBER AND PER CENT OF ALL WEEK WORKERS IN NINE FACTORIES IN
NEW YORK CITY, WITH AMOUNT OF ADVANCE IN WEEKLY RATES — BY SEX

	Male	Female	Both	Per cent of all
Total number employed...	631	1,236	1,867	100.
<i>Amount of Advance</i>				
No advance.....	498	1,083	1,581	84.5
\$0 25-\$0 49.....	1	2	3	0.2
0 50- 0 99.....	25	108	133	7.1
1 00- 1 49.....	63	27	90	4.8
1 50- 1 99.....	7	7	14	0.7
2 00- 2 99.....	27	8	35	1.9
3 00- 3 99.....	5	1	6	0.3
4 00- 4 99.....	1	.....	1	0.1
5 00- 5 99.....	2	.....	2	0.2
6 00- 6 99.....	*2	.....	2	0.2
Total number advanced...	133	153	286	15.5

In order that the relation between wages and experience may not be confused by including all kinds of workers, we here present a schedule of the median weekly earnings of 794 male cutters

* Of these, one was advanced \$8.00.

and 1,810 female strippers classified by length of time in the trade.

TABLE XXI

CUTTERS AND STRIPPERS

WEEKLY EARNINGS BY TRADE EXPERIENCE—NUMBER AND PER CENT OF WORKERS BY YEARS IN TRADE, AND MEDIAN WEEKLY EARNINGS—NEW YORK STATE

YEARS IN TRADE	CUTTERS (MALE)			STRIPPERS (FEMALE)		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	105	13.2	\$7 16	171	9.4	\$5 29
1.....	61	20.9	9 25	168	18.7	6 39
2.....	58	28.2	9 89	241	32.	7 19
3.....	50	34.5	12 00	267	46.8	7 83
4.....	34	38.8	12 43	193	57.5	8 21
5.....	33	43.	13 17	176	67.3	9 16
6.....	41	48.2	12 50	139	74.9	9 12
7.....	31	52.1	14 63	103	80.6	9 24
8.....	31	56.	15 83	89	85.5	9 32
9.....	17	58.1	13 50	46	88.1	10 25
10-14.....	118	73.	16 32	154	96.6	9 45
15-19.....	77	82.7	16 55	36	98.6	9 86
20-24.....	51	89.1	18 42	14	99.3	8 00
25-29.....	34	93.4	16 00	7	99.7	10 75
30-34.....	33	97.5	17 00	4	99.9	10 50
35-44.....	18	99.8	16 00	2	100.	9 00
45 and over.....	2	100.	17 00	.....	.....	.....
Total.....	794			1,810		

It will be noted that in these relatively skilled occupations, the majority of men rise to \$18 only after 20 years of experience, and then fall off. Representative women attain the \$10 level after 9 years at work in the trade. Although some of the 12 per cent who continue more than 10 years keep up to this level, the majority drop out, and more than half of them never make as much as \$11. Both men and women in these lines approximate their high water mark after 10 years of work. The few able survivors are not numerous enough to overbalance the general tendency for the earnings of men to fall after 25 years of labor. In the case of women, diminishing returns appear even sooner.

HOME WORK

Our investigators found some home work, both in fine and course grades of goods. Elaborately decorated cardboard boxes and favors are done in this way. Occasionally a factory worker takes material home to finish herself, or has other members of the family help. Certain tasks, as fitting parts together, can be done perfectly well by out-workers, and some of these have been

found. Their connection with a factory is apt to be uncertain and their earnings very small. Such work is usually regarded as furnishing a supplementary wage to housewives. The following list taken from one factory shows one week's earnings and the length of time the home worker had been on the firm's payroll.

WORKER	Week's earnings	Weeks with firm
L. S.	\$0 25	1
W. S.	25	3
W. McD.	25	10
N. F.	40	2
V. G.	60	1
Mrs. M.	2 50	1
G. D'A.	2 50	16
Mrs. K.	3 00	5
L. W.	5 00	41
Total 9.	\$14 75	80
Average.	\$1 64	9

These meagre data indicate that few persons could live on such precarious earnings, and that extensive competition by home workers would be disastrous for the trade. We have not attempted to investigate the extent of such work, but we believe its continuation in connection with containers for food has an important sanitary side as well as an economic bearing.

WAGES AND MARRIAGE

We have remarked that the number of young single women in the paper box trade is very large. Men who enter the business must compete on a general wage scale that is established largely by the earnings of this kind of help. Indeed, although married people are usually steadier than those without direct domestic responsibilities, it is questionable whether the support of a family is generally the basis for fixing wages.

The following table shows the amount of weekly earnings below which half the persons in each marital group are found.

TABLE XXII
MEDIAN WEEKLY EARNINGS BY CONJUGAL CONDITION

	Male	Female
Single.	\$9 11	\$6 52
Married.	14 56	7 24
Widowed or divorced.	12 83	7 95

EARNINGS AND NATIVITY

As already indicated, immigrants tend to fill in the less skilled occupations and therefore as a rule are paid lower than natives. We have also remarked that foreign men enter lines where native women and boys do much of the work. The following table shows that the recompense for men born abroad is less than that for native males, but that foreign women range slightly higher than native girls. The differences are due in part to the age of operatives and also to the character of their work.

TABLE XXIII
MEDIAN WEEKLY EARNINGS BY NATIVITY

	Male	Female
Native.....	\$11 39	\$6 60
Foreign.....	11 04	6 74

STATUS OF THE TRADE

The question now arises, What can the trade afford to do? Unquestionably the business is growing. Our accountant was able to secure financial statements from the books of ten representative firms. Wherever possible these were checked up from the original records. There were many differences noted in the distribution of various items by certain firms. The estimation of overhead charges and their calculation of profits are subject to correction. The following comparative and summary schedule shows the analysis of accounts for the fiscal year of 1912.

PERCENTAGES OF EXPENSES AND RECEIPTS, BASED ON NET SALES

Factory number	Cost of material used in manufacture of goods sold	Wages of employees engaged directly in manufacturing	Other manufacturing costs	Selling and delivery	Office	General expense	Administrative salaries	Net profits on sales	Other income	Total net profits
206	38.80	26.62	8.70	9.13	2.85	0.93	6.05	6.92	1.77	8.69
232	37.90	22.50	11.90	19.30	2.20	2.50	2.30	1.40	....	1.40
252	28.17	33.14	24.01	10.13	*	*8.62	*	†—4.07	0.77	†—3.30
274	35.85	30.71	9.05	7.53	3.69	3.15	5.80	4.22	0.45	4.67
282	29.50	39.00	6.10	5.20	2.90	2.60	12.50	2.20	0.30	2.50
283	30.41	16.78	24.25	12.61	3.31	2.66	5.40	4.58	0.87	5.45
322	32.43	30.44	6.63	4.74	0.74	....	.....	25.02	....	25.02
323	45.99	18.65	5.93	4.81	1.61	0.42	11.96	10.63	....	10.63
354	32.63	22.10	7.61	5.82	1.40	3.05	5.01	22.38	....	22.38
355	40.90	24.93	13.40	7.54	1.34	2.96	2.04	6.89	2.11	9.00
Average..	35.25	24.83	14.73	9.84	2.47	2.25	4.30	6.40	1.00	7.40

* The amount chargeable to the paper box manufacturing branch of this business for office and general expenses and administrative salaries is estimated and charged in a lump sum. The details could not be obtained.

† Loss.

This represents sales amounting to over \$1,347,000. A notable feature is the large item for miscellaneous costs. Paper boxes are awkward to handle and expensive to store, so that rent and delivery charges also figure large. The labor cost is about one-fourth of the value of the marketed product. Net profits do not appear to be excessive, if these figures can be trusted.

It is remarkable how greatly the labor cost varies. This of course is in part due to the amount of machinery and supplementary or "non-productive" labor used. Still a variation of nearly 100 per cent (from 17 per cent to 39 per cent) leads one to believe that the economy of the business is by no means standardized.

Paper boxes are probably cheap enough considering the human labor that enters into their manufacture. According to our figures, an increase of 10 per cent in the general level of wages would not necessarily raise the price 2.5 per cent nor reduce profits by the same amount. That is, adding 10 per cent of 24 per cent to the cost could be met in either of these ways, or by reducing the force and paying more to those retained.

The following analysis of the accounts of a representative plant shows the distribution of amounts in making 1,000 collar boxes:

Items	Amounts	Per cent of cost
Merchandise and materials	\$14 30	44.3%
Productive labor	8 64	16.8
Non-productive labor	3 39	10.5
General manufacturing expenses	3 36	10.4
Administrative charges	2 56	8.
Total cost	\$32 25	100. %
Selling price	35 26	109.3%
Net profit	\$3 01	9.3%

So much may serve to give an idea of the economy of the trade and of the proportionate reward of labor.

2. REPORT ON A HUNDRED ACCIDENTS IN THE PAPER BOX INDUSTRY OF GREATER NEW YORK

By MARIE S. ORENSTEIN.

INTRODUCTION

When we realize that 22.4 per cent of the workers in the paper box industry of this city are tending machines, the exposure to accidents is obvious.¹ To be sure, the inherent hazards in these machines vary from the harmless stripping and labeling machines to the actively dangerous stamping and cutting machines, such as the paper cutter with a knife pressure of 2,200 pounds, or the corner stayer. A remark common to the trade is: "You ain't considered a good setter-up (operator on a corner stayer) unless you've bin caught." The New York Labor Law in its prohibition of employment of minors in dangerous trades includes paper cutting and corner staying machines. The Federal Department of Labor, rates the paper box industry the fourth in the number of accidents to women and minors.²

For the year ending September 30, 1913, the New York State Labor Department reports 679 injuries in this trade, that is, an accident rate of 4.6 per 100 employees. If anything, these figures are too conservative, for they are based almost exclusively on reports of manufacturers to the Labor Department. The legal provision is: "that within 48 hours after the time of the accident, death or injury, a report thereof shall be made in writing to the Commissioner of Labor." Without any dishonorable intentions, proprietors may omit reporting certain accidents because they are not of much consequence. A case in point is firm A, where the reports to a liability company for a period of three months covered 18 minor accidents, 6 more serious ones — among the latter three on power punch presses, two on tube rolling machines — yet they had reported only four injuries to the Labor Department for the past year.

In the present study of one hundred accidents taken at random from paper box establishments in Greater New York, no uniformity as to time has been observed. Fifty-six of the accidents

¹ Third Report of The Factory Commission, Appendix II, Report on Paper Box Industry in New York City.

² Vol. XI, Employment of Women in the Metal Trades, p. 77.

occurred within one year of the date of inquiry; seventeen more than in five years. Records of injuries dating back several years and occurring at other firms than those at present employing the workers were obtained, since no conclusion as to frequency of accidents is sought. But answers to these questions were sought by the survey. To what degree, if any, are the earnings of these workers affected by accidents? Are certain processes inherently hazardous, and if so, is there a recognition of, and compensation for this factor in the wage pay?

SCOPE

The twenty-four establishments visited employ from 6 to 2,200 persons and are located in Brooklyn, in the lower and upper east side and also in the west side of New York City. They manufacture practically every variety of carton from the ordinary hat, shoe, cigarette and pharmaceutical box to the corrugated and round boxes, tubes and paper specialties. The group of accidents obtained, though limited in number, are fairly representative of the kind of injuries from which paper box operatives suffer. Selection has been exercised only in so far that, accidents not due to machines and processes peculiar to this trade, such as, incidental risks to which all factory workers are exposed, were eliminated.

METHODS

To locate injured operatives the list of factories reporting accidents to the Labor Department was used as an indicator. In addition, factories in the paper box locality were visited indiscriminately. The hands of practically all machine tenders in these shops were examined, and workers interrogated. The employees were asked to demonstrate and carefully explain just how, where and why they were hurt. Foremen, employees, and all available records were consulted, wherever possible.

STATUS OF WORKERS

TABLE I
SEX AND AGE OF EMPLOYEES

	Total	14-15	16-17	18-20	21-24	25-29	30-34	35-39	40-44	45-54	55-64	65 +	N.R.
Male.....	51	1	3	10	14	7	11	2	...	2	1	...	....
Female.....	49	...	8	15	14	8	4	...	...	...	...	...	....
Total....	100	1	11	25	28	15	15	2	...	2	1	...	....

A glance at Table I shows that of the group of injured workers, 49 were women and 51 were men. Women comprise over two-thirds of the paper box workers in New York City,³ and about the same proportion holds for the 24 specific establishments covered. But over one-half of the men and less than one-tenth of the women are machine hands. Consequently the number of men injured in the industry, tends to exceed that of women. Over one-half of the men and women are between 18 and 24 years of age, while more than one-third of the men and only one-fourth of the women are between 25 and 34. There are no women over 34, but 3 men are between 45 and 64. That is, the age of the males is on the whole higher than that of females. The small representation of 8 girls and 4 boys between 14 and 17 years is very probably due to the legal prohibition, since in the Federal Report the accident rates for females under 16 in the paper box trade is given as 10.14 per cent per 100 operatives.⁴

TABLE II
SEX BY NATIVITY AND PARENTAGE

NATIVITY	Male	Female	Both
Native born of native parentage.....	6	16	22
Native born of foreign parentage.....	14	28	42
Foreign born of foreign parentage.....	31	5	36
Total.....	51	49	100

It will be observed in the table above that foreign born men of foreign parentage outnumber native born of native or foreign parentage nearly two to one. In the trade for the city, foreign men outnumber native born males, three to two.⁵ The natural conclusion might follow that here is a flagrant exploitation of the ignorant foreigner, who because of his "greenness" and consequent helplessness is placed on the dangerous machines at perhaps a lesser compensation than would be acceptable to a native. However, this first impression is invalidated by the negligible number of men who had been in this country less than a year when the accident befell them. Turning to the women, it ap-

³Third Report of the Factory Commission, Appendix II. Report on the Paper Box Industry in New York City, p. 109. "Considering factory workers alone, females comprise over 71 % of the hands."
⁴Volume XI, Employment of Women in the Metal Trades, page 73. (Report on Woman and Child Wage-earners.)
⁵Third Report of the Factory Commission, Appendix II. Report on Paper Box Industry in New York City, page 111.

pears that nearly nine-tenths are native born of either native or foreign parentage. This again parallels with the trade as a whole. "Young women of native birth constitute the largest group in the industry."⁶ In this trade as in most others, the native born women occupy the skilled positions, although the technical work of men is not so limited.

EXPERIENCE AND OCCUPATION

The number of years in the trade and the specific occupation at the time of accident are shown in the following table.

The machines operated by this group can be roughly divided into three classes: cutting machines, stamping machines, and machines that combine stamping and cutting. The corner stayer, which is the best representative of the latter class, is responsible for one-half the number of women and over one-half the number of men hurt in this group. A brief description, therefore, of its mechanism and operation is pertinent.

The corner stayer is a machine in which the corners of a paper box are fastened by glued strips of paper. As the operator turns successively each corner of the bent up box over a right angled form called an anvil, he or she presses a foot lever setting the machinery in motion. At one operation the glued strip is drawn over the corners, is cut off by a vertical knife at the back of the machine and is fastened around the corners of the box by the descent of the plunger or head, a reverse form fitting closely over the lower form. Thus the box corners are closed and reenforced. Its danger comes in two ways. The strips sometimes do not come forward properly. When this occurs the operative "instead of getting the picker which has been provided, but takes more time, puts her finger on to the anvil to take off the bit which has adhered and with involuntary motion — she puts her foot on the treadle and down comes the head and off goes the end of her finger." Secondly, in the hurry of operation, the worker allows his or her finger to slip beneath the plunger when "flipping" the box.

⁶ Appendix II Report on Paper Box Industry in New York City, page 111.

TABLE III
YEARS IN TRADE AND OCCUPATION AT TIME OF ACCIDENT, FEMALE

OCCUPATIONS	YEARS IN TRADE														Total
	Less than 6 months	6-11 months	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10-14 years	25 years	32 years	
Corner layer.....	4	.....	3	4	2	3	1	2	1	..	..	2	..	..	22
Power punch press.....	1	1	2	1	3	..	..	..	..	..	..	..	..	..	3
Wire stitcher.....	2	1	1	.....	1	..	..	..	..	..	..	..	..	..	5
Corner cutter.....	.....	.....	1	1	.....	..	..	..	..	..	..	..	..	..	2
Lacer.....	1	..	2	.....	..	..	..	..	..	..	..	..	..	..	3
Carton machine.....	1	1	1	.....	.....	..	..	..	..	..	..	..	..	..	3
Others.....	2	.....	1	.....	1	1	1	..	..	..	..	..	..	..	6
Total..	11	3	11	6	7	4	2	2	1	..	..	2	..	..	49

much power.

machine, 1 operator on wrapping machine, 2 strippers, 1 operator on

One girl under "10-14 years," on corner stayer, was set-up one week when accident occurred. Under corner stayer "less than 6 months," 2 girls had worked 2 or 3 days before accident. One girl under "w/ire stitcher less than 6 months" had been on machine 1 week before accident. One girl under "power punch press less than 6 months" had been on machine 1 month before accident.

TABLE III (concluded)
YEARS IN TRADE AND OCCUPATION AT TIME OF ACCIDENT, MALE

OCCUPATIONS	YEARS IN TRADE															Total
	Less than 6 months	6-11 months	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10-14 years	25 years	32 years		
Corner stayer	2	..	3	3	6	1	4	2	3	..	1	4	..	..	29
Power punch press	1	1	..	..	..	..	..	..	..	1	..	..	1	..	4
Paper cutter	..	1	..	..	..	..	..	1	..	..	1	..	..	1	4
Corner cutter	1	..	..	..	..	1	..	..	..	..	..	..	..	..	2
Ender	1	..	..	..	..	..	1	..	1	..	..	..	..	..	3
Automatic labeler	2	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Tube roller	1	1	..	..	..	..	..	..	..	..	..	..	..	..	3
Others	..	1	..	..	..	..	..	..	..	..	..	3	..	..	4
Total	8	4	3	3	7	2	5	3	4	1	2	7	1	1	51	

Under "others,"]
Under "less than 6
Under "1 year," 1
Under "2 years,"
Under "3 years,"
Under "4 years,"
Under "5 years,"
Under "6 years,"
Under "10-14 years"

to do floor work and had no business fooling with machine.
accident happened.

instructions.

The Federal Report rates corner stayers second to presses among machines causing injuries to workers.⁷ In the figures of the New York State Labor Department, for 1913, 35 per cent the largest single group of accidents in the paper box trade, is reported due to corner stayers. This machine caused 51 per cent of the accidents studied. Power presses were responsible for the next largest percentage of accidents, injuring almost one-eighth of the operatives reported in this group.

It should be stated that in the above table "years in trade," are not synchronous with the length of time the injured workers had been employed upon the kind of machine at which the accident occurred. Therefore, in tracing the relationship between injury and trade experience, we get a general tendency rather than absolute accuracy. To illustrate, one man at the end of three years' experience was placed by a new employer on a corner stayer. With no instruction of the ever present risk, at the end of his first half hour's work on the new machine, the man left the first joint of his index finger on the anvil. Reviewing the figures on "years in trade," it appears that over one-half the injured women and less than one-third of the men had been in the trade one year and less when injured. At the most, about one-eighth of the total have been hurt during their first few days at new machines, as witness the girl who lost two joints on a power punch press at the end of her first day's work who said: "and I was so careful because I was so afraid." The table, in a general way, indicates that in the case of men, short trade experience is neither as important nor as direct a factor in the accidents, as with women. This might be ascribed to the inherent sensitiveness of woman's nervous system which subjects her to greater danger during the initiatory period, and to the fact that while a boy is brought up with tools, a girl, as a rule, has little familiarity with them. Though few workers found some connection between their novitiate and injury, one woman's comment is expressive of the general attitude: "And here was me settin-up ten years. Then one day me finger slips in and I lose a joint off it. It just ain't any use, if its goin' to happen to you its goin' to, no matter how careful you are or how long you've ben at it. Nobody can be too smart, or in this business too long but what they will some day get caught."

⁷ Employment Women in the Metal Trades, p. 81

NATURE AND LOCATION OF ACCIDENT

Table IV shows the number of persons involved in each specific kind of accident and the place of accident. It is quite patent that the character of these machines confines injuries, varying in degree of severity, almost wholly to fingers and hands. Over one-half the injuries are bruises. They range from a slight abrasion to very ugly crushed fingers and nails. It is not uncommon for an operator to have his or her nail torn off and left on the anvil of the corner-stayer or the die of an ender. Lacerations also differ in gravity from slight cuts to instances where a punch press operator had her entire finger cut open and a setter-up had a piece sliced out of her finger by the vertical knife of a corner stayer.

The few who suffered trauma lost part of the bone but the appearance of the finger was very slightly altered. One setter-up told me how two doctors put him under ether and scraped part of his bone, then sewed up his finger.

Over one-sixth of the workers lost one or two joints, one-third of these losses occurring on corner-stayers and over one-half on cutting machines and punch presses. Some of the details are rather gruesome. One man relates that when the head of the corner-stayer struck his finger, the concussion threw off the belt. When it was replaced and the plunger lifted a finger joint dropped to the floor. A punch press operator described how her finger joint, when taken from between the dies, was hanging on by a bit of flesh. She was hurried to the hospital where the bone was completely removed and the finger sewn up.

Perhaps the most terrible accident befell Hans S., a man 50 years old at the time, and a paper cutter of many years' experience. An over-cut knife with a pressure great enough to cleave a horse in two, descended upon his right hand completely severing it a little above his wrist.

TABLE IV
NATURE OF ACCIDENT AND PLACE OF ACCIDENT

NATURE OF ACCIDENT TO HANDS AND FINGERS	Total	Sex	Total	Corner staying machine	Punch press	Corner cutting machine	Wire stitching machine	Lacing machine	Paper cutting machine	Carton machine	Ending machine	Automatic labeling machine	Tube rolling machine	Others*
Bruises (crushed fingers)	53	Male	29	22	1	1	3	3	3	3	3	3	3	2
		Female	24	14	2	1	3	3	3	3	3	3	3	1
Lacerations	23	Male	7	3	1	1	1	1	1	1	1	1	1	3
		Female	16	5	3	1	1	1	1	1	1	1	1	1
Trauma	3	Male	2	1	1	1	1	1	1	1	1	1	1	1
		Female	1	1	1	1	1	1	1	1	1	1	1	1
Curvature	2	Male	1	1	1	1	1	1	1	1	1	1	1	1
		Female	1	1	1	1	1	1	1	1	1	1	1	1
Loss of 1 joint	10	Male	6	2	1	1	1	1	1	1	1	1	1	1
		Female	4	2	1	1	1	1	1	1	1	1	1	1
Loss of 2 joints	5	Male	3	1	1	1	1	1	1	1	1	1	1	1
		Female	2	1	1	1	1	1	1	1	1	1	1	1
Loss of hand	1	Male	1	1	1	1	1	1	1	1	1	1	1	1
		Female	1	1	1	1	1	1	1	1	1	1	1	1
Loss of part of forearm	1	Male	1	1	1	1	1	1	1	1	1	1	1	1
		Female	1	1	1	1	1	1	1	1	1	1	1	1
Splinters	2	Male	1	1	1	1	1	1	1	1	1	1	1	1
		Female	1	1	1	1	1	1	1	1	1	1	1	1
Total	100	Male	51	51	12	4	5	3	4	3	3	3	2	10

* Others — Women: 1 stripper; 2 operators on creasing machine; 1 tube roller attendant. Men: 1 end chopper; 1 scorer; 1 tube roller attendant not on machine.

It has been stated above that the corner-stayer is responsible for more accidents than any other one machine in this trade. This may be partly accounted for by its being used in greater numbers than the more dangerous cutting and press machines, and since its operation requires dexterity rather than skill, younger and less experienced workers are employed.⁸ Also since the consequences are not as dire (for in this group one-tenth of "setters-up" as compared with almost half of the force on cutting and press machines lose members) neither employer nor employee exercises the necessary caution.

From the foregoing table not much more than a speculation can be made—because the figures are too small—on the comparative hazards to men and women who are working in this occupation and are subjected to the same dangers. On corner-stayers there were nearly one-third more men than women hurt, but on punch presses the women doubled the men. The Federal Report reads: "The evidence seems conclusive that among press hands at least, women run a much greater risk of injury than men."⁹

An analysis of the records shows that in about three-quarters of the cases right hands were hurt, and nearly always the first joints were affected, and over one-third of the injured members were index fingers. This proves, beyond doubt, that the accidents happened in the processes of feeding machines. Approaching this subject from a different angle, we find that 84 per cent of the injuries occurred at the point of operation, while 16 per cent were at the driving mechanism. This very closely approximates the New York Labor Department figures for 1913, which show that for this trade 89 per cent of the casualties were due to the machine per se, and 11 per cent to gearings, belts, etc. It might here be said that one of the severest accidents befell a man on the cog wheels of a paper cutting machine. While the operator was fastening a nut underneath the machine, the driv-

⁸ The distinction between dexterity and skill is as follows:

⁹ Dexterity.—Where manufacturer and educator speak of dexterity, they mean the operation of a single tool or a single process wherein speed and repetition are the chief elements. Skill is not only the ability to work with a variety of tools but also the power to think, that is, to judge and select and decide; it presupposes a background of technical knowledge. Dexterity is manipulative skill and is habitual. Skill is manual knowledge and is formative."

ALICE BARROWS FERNANDES,

Director Vocational Education Survey of New York.

⁹ Employment of Women in Metal Trades, p. 85.

wheel caught the man's sleeve and his left arm was drawn in. His forearm was terribly crushed and four inches of the splintered ulna were removed. The arm and hand are of practically no value to the man, for there is a complete immobility of the forearm and a limited action of the wrist and hand. In speaking of this miserable time the man said: "When I called for help the men were afraid to touch me or the machine. I had to stop its action and extract my arm myself. Then I went up to the office and told them to call up Hospital ————. I was particular as to where I should be treated." On the basis of the above data one may justly assert that machine guards in this industry are on the whole inadequate. But this subject will be further pursued under the following paragraphs regarding causes of accident and place of accident.

CAUSE AND PLACE OF ACCIDENT

In the discussion of causes of accident, account has been taken of both the human and the non-human machines. Each of the 100 persons was carefully questioned as to just how the accident happened, so that the direct and contributory causes might be ascertained in every case. However, absolute exactness is impossible, because personal equation and circumstances, perhaps not mentioned, intrude constantly. Also, time may have dimmed the memory of some of the people.

The large group of unclassified in the following table indicates the difficulty besetting any effort to appraise these factors. Here the evidence as to cause of accident was either vague or insufficient.

TABLE V (concluded)
PLACE OF ACCIDENT AND CAUSES OF ACCIDENT

PLACE OF ACCIDENT	CONTRIBUTORY CAUSES																		TOTAL			
	UNGUARDED		DEFECTIVE APPLIANCES		NATURE OF WORK		SPEEDING		ILLNESS		CARELESSNESS		INADEQUATE LIGHTING		OVER CROWDING		OTHER CAUSES				UNCLASSIFIED	
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male			Male	Fe- male
Corner stayer.....	....	....	9	1	2	2	4	2	....	2	2	....	5	5	3	....	....	....	4	10	29	22
Power punch press.....	1	....	....	2	....	....	1	....	....	....	....	2	1	1	....	....	....	....	1	3	4	8
Corner cutter.....	1	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	1	2	2
Paper cutter.....	2	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	4	....
Wire stitcher.....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	1	....	5
Automatic labeller.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	....	3	....
Lacing machine.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	....	3
Ending machine.....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	1	....	3	....
Tube rolling machine...	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	3	....
Carton machine.....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	2	....	3
Others.....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	1	5	3	6
Total.....	6	....	9	3	2	2	5	4	....	2	3	5	11	7	4	....	....	....	11	25	51	49

Those machines were classified as unguarded on which it is ordinarily considered practicable to have guards and where guards, though supplied, were made ineffectual by employer or employee. In analyzing the table, we find that the direct cause in over half the accidents was unguarded machinery. Guards are reported as ineffectual in one-quarter of these cases — as for example when lifted aside on the corner-stayers or when metal thimbles provided by the firm were not used. In three-quarters of the instances there were no guards. It might be argued that it is hardly fair to ascribe so many injuries to the unguarded state of machines, since one of the accidents records dates back fifteen years. However, three-quarters of the total were hurt less than five years ago. When the Knowlton guards — two shields on either side of the head of the corner-stayer — were on the market, press and cutting machine guards had also made their way into the shops. Nearly two-thirds of the corner-stayers and nearly one-half of the press machines were unguarded at the time of accidents. In several instances drive wheels, cog wheels and other moving parts were also unguarded.

The merit of the prevailing corner staying machine guard is rather questionable. The 18 accidents were traced directly to guarded stayers, and that in addition 13 accidents occurred on stayers with guards made useless — a total of 31 machines with guards out of 51 — is a poor recommendation for the safe-guards. Mr. Sedgwick, His Majesty's Factory Inspector, in testifying for the British Industrial Commission said: "The American machines (corner-stayers) have appliances on each side, which in my opinion are no guards at all. They are placed to keep fingers from getting between the head and the anvil, but they do not do anything of the kind."¹⁰ The evidence of the workers is not reassuring. One woman showed that in her case the guard not only did not protect but caused a more terrible injury by holding her finger down and breaking it at the joint, while the head of the machine crushed the top of it. Mr. Von Schaak speaks very highly of the metal thimbles. But operators and employers appear to hold conflicting opinions as to their efficacy. In one shop a proprietor said that he had a crushed steel thimble which had

¹⁰ Report from the Commissioner's inspector, 1911. Departmental Committee on Accidents in Factories, p. 637.

saved a man's finger, but a man inside of this shop, who has just been hurt, exclaimed, "If I had had thimbles on I should have no finger left." The greatest objection raised by workers is that these guards impede speed, and even if the operatives are not on a piece basis, one process fits into another and they cannot "let up." Every factory had either or both of these safeguards, but a large percentage of them were not used. One firm, however, has absolutely fool proof guards for staying machines. The cost of each safe-guard is \$50. One of the proprietors said that it more than pays for itself in a short time. It was adopted 1½ years ago, and since then not an accident has happened on the corner-stayer, although formerly there were days when two or three operators were hurt.

At another firm a very adequate stamping press guard, constructed along the best principles of safety, was seen. When the machine is not in motion the guard cannot be displaced, and when the guard is swung open the machine cannot be tripped.

Liability reports, employers and foremen considered most of the accidents due to deliberate carelessness of the worker, or to the worker's becoming inattentive and automatic. Yet: "A power machine worker must for the sake of both safety and efficiency become automatic — for only thus comes skill and comparative safety. If the degree of attention necessary at the outset is continued through any extended period, the strain would be destructive. No normally constituted person could continue under it without grave damage. Machine operating does not involve as irresponsible agent, the machine, and a responsible one, the worker. In many cases the worker is hardly more responsible than the machine. A machine so constructed that at intervals its own parts interfere with each other, causing serious breakage and loss, would be either modified or quickly discarded. Our compound machines, of man and metal, must be treated in the same way. It is a false assumption that the worker's intelligence and care should be expected to avoid hazards which can be removed by improved construction."¹¹ The term "carelessness" as used in the table includes a variety of "injudicious acts," such as cleaning moving parts of machines, reaching under guards, etc.

¹¹ Employment of Women in Metal Trades, p. 62.

Many operators in explaining cause of accident said, "I was doing work on small pieces on this machine and so got hurt." Instances of this sort fall under "nature of work."

Speed is, of course, an industrial by-word. Hence, it was not strange that it was a prime factor in some cases. Rather common to the trade is the remark, "It was busy. We had a rush order and I was working three setting-up machines. I had so many girls to keep me a-going that I got excited and my finger slipped in."

A glance at the section of the table dealing with "contributory causes" discloses poor lighting as being largely responsible in the secondary way for accidents. It is rather startling to find that even in the best equipped factories some of the most valuable light space is used for stock and operations that are not particularly exacting. At plant B, which has excellent equipment, I found about a dozen corner-stayers located in a part of the old building which was so dark that I fairly groped my way when coming in from the out-of-doors. To be sure, there was a powerful electric light but so situated that it was more of a hindrance than help, for it cast shadows on the work. Therefore it was rarely switched on, the girls finding it easier to work in semi-darkness. Flickering gas jets were also a cause for complaint. Just by a little efficiency engineering these causes could be removed.

DISTRIBUTION OF ACCIDENTS BETWEEN MORNING AND AFTERNOON

The following figures have been obtained on the subject of distribution of these accidents between morning and afternoon:

Forty-two or approximately two-fifths were injured in the morning.

Fifty-one or approximately one-half were injured in the afternoon.

Seven or approximately one-fifth not reported.

This proportion holds good in the case of men, if considered separately, and of women when taken by themselves. From these figures no conclusions can be drawn, although one is led to believe that, at least for this group, fatigue was a factor in accidents. "The statistics of all countries which have recorded the hours at

which such injuries occur prove that, other things being equal, the accidents increase progressively up to a certain time in the morning and again in the afternoon work.”¹² Mr. Fred Colvin, Associate Editor of the American Machinist, finds that: “Accident increase in afternoon due to fatigue and failing light. In machine shops most accidents occur in winter after 3 P. M.”

DISABILITY AND NATURE OF ACCIDENT

We have now come to the question of nature of accident and time lost. It appears that over one-fifth of the employees lost no time. About two-fifths lost from a few hours to one week; over one-fifth were absent from their jobs from two to seven weeks; less than one-sixth from two to fourteen months. Excluding the group who suffered no loss, the average loss per person was about twenty-seven days. Here “time lost” is an approximation, since in many instances the data are based almost wholly on the recollection of the injured. It is striking that as much time — six months — should be lost by a man who suffered from a bruise as a man who lost a hand. Yet, the extended absences for slighter injuries are easily explained by the frequency with which blood-poison ensues, the metal, the paste, or neglect being the cause of sepsis. There was one girl who plunged a wire into the back of her hand while “legging”, and though she dragged it out, local infection was started and so she was disabled for one month. One setter-up, “who did not feel much at first”, rushed off at 3 A. M. next morning to the doctor, who diagnosed his trouble as blood-poisoning.

Nervous shock sometimes follows even the less serious accidents. One girl related how she had stayed at home two months, not only to give her crushed finger time to heal — “That would not have taken so long, but it’s the shock I got.” And the man who lost his hand was more than eight months home getting over the nervous disturbance. To this day he has a wild, startled look about his eyes, which comes to those whose nerves have been severely strained.

¹² Goldmark, *Fatigue and Efficiency*, 3d Edition, 1912. p. 71.

TABLE VI
NATURE OF ACCIDENT AND TIME LOST

NATURE OF INJURY	Total	Sex	Total	TIME LOST											
				No time lost	Less than 1 day	1 day to less than 2 weeks	2 weeks to less than 3 weeks	3 weeks to less than 4 weeks	4 weeks to less than 5 weeks	5 weeks to less than 8 weeks	2 months to less than 3 months	3 months to less than 4 months	5 months to less than 6 months	6 months to less than 7 months	14 months
Bruises.....	53 {	Male..... Female..	29 24	4 7	8 3	6 6	2 3	..... 1	3 1	1 2	3 1	1	..... 1	1	.....
Lacerations.....	23 {	Male..... Female..	7 16	1 6	3 2	1 5	..... 1	.....	..... 2	.....	2	.....	.....	.....	.....
Trauma.....	3 {	Male..... Female..	2 1	..... 1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Curvature.....	2 {	Male..... Female..	1 1	.....	.....	1 1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Loss of one joint.....	10 {	Male..... Female..	6 4	.....	.....	2 2	2	.....	..... 1	.....	1 1	1	.....	.....	.....
Loss of two joints.....	5 {	Male..... Female..	3 2	.....	.....	.....	.....	.....	.....	..... 1	1	1 1	1	.....	.....
Loss of hand.....	1 {	Male..... Female..	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
Loss of part of forearm...	1 {	Male..... Female..	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Others.....	2 {	Male..... Female..	1 1	1 1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	100	.....	100	21	16	25	8	1	7	5	9	4	1	2	1

NATURE AND TIME OF DISABILITY

In the following table "partial disability" means the period when the workers returned to the shop but were assigned different jobs pending the recovery of their injured members; or the time spent convalescing; or days lost due to the injured person's inability to find employment. "Complete disability" covers the time lost while utterly incapacitated.

Under "complete disability," 11 per cent of the men and 30 per cent of the women worked right on after the injury; here the average loss per man absent was thirty-seven days as against fourteen days for women absent. Through "partial disability" 60 per cent of the men and 43 per cent of the women lost no time, but the average loss per male absent was forty-one days as compared with twenty-nine days per female absent. Coming to time lost through both partial and complete disability, 6 per cent of the men and 14 per cent of the women lost no time; yet, the average loss per man absent was forty-nine days while for women absent was thirty-two days. It must be remembered that these figures are based almost wholly on the best recollection of workers.

Even conceding that the average time lost per male is overweighted by one paper cutter, who lost a hand and was out fourteen months, still the figures are convincing, beyond doubt, that injuries befalling the men were more grave than those suffered by the women of the group. This is easily explained by the fact that men operate the most hazardous machinery in this industry.

"Serious injury" is open to various interpretations, but in the following discussion it will be measured by the two criteria adopted by the Federal Bureau: "any injury involving permanent bodily mutilation or deformity or entailing a loss of time to the extent of two weeks or more."¹³ With the above as a definition and Table VI as a basis, it appears that thirty-eight persons of the 100 were seriously injured. Of these, twenty-three, or over three-fifths, were men. Allowing for those employees who have dropped out of the industry because of the severity of their accident, the percentage of seriously injured is comparable with the results obtained by the Federal Bureau of Labor.

¹³ Vol. XI. Employment of Women in the Metal Trades, p. 78.

TABLE VII
TIME AND NATURE OF DISABILITY

NATURE OF DISABILITY	Total	Sex	Total	TIME OF DISABILITY												Average days lost per person		
				No time lost	Loss than 1 day	1 day to 1 week	2 weeks	3 weeks	4 weeks	2 months	3 months	4 months	5 months	6 months	8 months		12 months	14 months
Complete.....	100	Male...	51	6	11	11	4	.....	5	6	3	1	1	2	.....	.....	1	37
		Female..	49	15	6	13	4	1	7	2	1	.....	.....	.....	.....	.....	.....	14
Partial.....	100	Male...	51	31	.....	2	2	6	3	4	.....	.....	.....	2	1	.....	.....	41
		Female..	49	21	1	4	5	4	7	5	2	.....	.....	.....	.....	.....	.....	29
Both.....	100	Male...	51	3	4	6	6	6	7	10	2	1	1	1	3	1	.....	49
		Female..	49	7	1	6	5	6	13	9	.....	.....	.....	.....	2	.....	.....	32

From the records themselves it is found that 12 men and 7 women have suffered some permanent partial disability.¹⁴ In this 19 per cent of the total only those have been included who have lost members or the use of them. Of the remaining operatives, the majority bear either scarred or deformed fingers and nails, and many experience numbness or pain in cold weather. This must mean that it takes a little more effort to manipulate as readily as before.

CHANGE OF OCCUPATION DUE TO INJURY

TABLE VIII

CHANGE OF OCCUPATION — IMMEDIATELY AFTER ACCIDENT AND AT TIME INTERVIEWED

	OCCUPATION AFTER ACCIDENT					
	SAME			CHANGE		
	Male	Female	Total	Male	Female	Total
Occupation immediately after injury.....	27	16	43	24	33	57
Occupation at time interviewed.....	36	33	69	15	16	31

A reading of the preceding table indicates that immediately after the injury nearly one-half of the men and over two-thirds of the women were engaged in occupations other than those in which they were hurt. However, at present less than one-third, both men and women, are engaged in operations different from those of the time of accident. Among them a number are unable to pursue their former jobs because of their disability; others have been made timorous by their injuries, as one soufflet machine operator said, "I am scared to death of that machine since it took off my finger joint. My father says I will never go back to it even though I am making just half of what I do at this job." Others again have just naturally drifted into different occupations.

REPEATED INJURIES SUFFERED

From the face of the records it appears that about one-sixth of the women and nearly one-half of the men have been injured in this trade at other times than now discussed. A few have been hurt three and four times, and all of these have suffered injuries of about the same character.

¹⁴ Workmen's Compensation Law of New York State. Report of the Commissioner of Labor p. 245. "Permanent partial disability . . . partial in character but permanent in quality. Total permanent disability . . . loss of both hands or both arms, or both feet or both legs, or both eyes, or any two thereof."

EFFECT ON WAGES

Examination of data shows the following facts regarding the wages of men:

6, or approximately $\frac{1}{8}$ were reduced.

38, or approximately $\frac{3}{4}$, were stationary.

7, or approximately $\frac{1}{8}$, were raised.

and of the women

5, or approximately $\frac{1}{10}$, were reduced.

43, or approximately $\frac{7}{8}$, were stationary.

1 was raised.

It is thus seen that these accidents have had very little immediate effect upon wages. In the few cases where the wages were raised it was undoubtedly compensatory, just as in the case of a large number of injured who continued to receive their regular wages during their absence—over one-third of the total being absent from work two weeks and over.

When the wages at the time of inquiry are compared with those at time of injury,—

we find that of the men:

6, or approximately $\frac{1}{8}$, were reduced.

17, or approximately $\frac{1}{3}$, were stationary.

28, or over $\frac{1}{2}$ were raised.

and of the women:

18, or approximately $\frac{2}{5}$, were stationary.

28, or approximately $\frac{4}{7}$, were raised.

2 were not reported.

From these figures we must apparently conclude that injuries have had no permanent depressing effect upon wages. This statement must be qualified, however, by the fact that in two-thirds of the cases of both men and women whose wages have been raised—from 50 cents to \$14 for men, 50 cents to \$5 for women—a period of one to fifteen years has elapsed since the injury. In only 7 per cent of the total there has been a loss in weekly wages from 50 cents to \$9. The accompanying table gives the details.

Though the occupations in which this group are engaged are the most dexterous and skillful in the trade, it appears that even the workers who suffered permanent partial disability can substitute healthy members for impaired ones, in the operation of their machines, or as in a few instances can take up a more responsible job, such as foreman, forewoman, etc. On the whole, the wages of this group have followed the rising curve resulting from increased trade experience as found in the whole industry of the city.

TABLE IX
LOSS OR IMPROVEMENT IN WAGES AND TIME ELAPSED SINCE ACCIDENT—MALES

TIME SINCE INJURY	LOSS PER WEEK						No change	GAIN PER WEEK											Total			
	\$1	\$2	\$4	\$6	\$6.50	\$9		\$8.50	\$1	\$1.50	\$2	\$2.50	\$3	\$4	\$5	\$5.50	\$7	\$7.50	\$8	\$9	\$11	\$14
Less than 6 months.....	1	1	1	1	1	1	13	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
6 months 1 year	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
2 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10 14 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15-19 years.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total.....	1	1	1	1	1	1	17	2	6	2	1	2	1	3	3	1	1	2	1	1	2	1

TABLE IX (concluded)
LOSS OR IMPROVEMENT IN WAGES AND TIME ELAPSING SINCE ACCIDENT--FEMALE

TIME SINCE INJURY	Loss per week \$6	No change	GAIN PER WEEK									Not re- ported	Total
			\$.50	\$1	\$1.50	\$2	\$2.50	\$3	\$4	\$4.50	\$5		
Less than 6 months.....	1	10	1	.....	.....	.....	.....	.....	.....	.....	.....	2	14
6 months-1 year.....	4	2	3	2	.....	.....	.....	1	.....	.....	.....	12
2 years.....	3	.....	.....	.....	3	1	.....	.....	1	.....	.....	8
3 years.....	1	.....	1	.....	1	.....	1	.....	.....	.....	.....	4
4 years.....	1	.....	1	.....	.....	1	.....	.....	.....	4
5 years.....	1	.....	.....	3
6 years.....	1	.....	.....	.....	1
7 years.....	1	.....	1	.....	.....	.....	.....	.....	.....	1
8 years.....	1	.....	1	.....	.....	.....	3
9 years.....
10-14 years.....	1	.....	.....	.....	.....	.....	.....	.....	1
15-19 year.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	2
.....
Total.....	1	18	4	6	4	6	1	1	3	2	2	2	49

TABLE IX
LOSS OR IMPROVEMENT IN WAGES AND TIME ELAPSING SINCE ACCIDENT—MALE

TIME SINCE INJURY	LOSS PER WEEK						No change	GAIN PER WEEK												Total		
	\$1	\$2	\$4	\$6	\$6.50	\$9		\$0.50	\$1	\$1.50	\$2	\$2.50	\$3	\$4	\$5	\$5.50	\$7	\$7.50	\$8	\$9	\$11	\$14
Less than 6 months.....		1	1			1	13	1	3	1												21
6 months-1 year.....							2	1	2	1	1	1									9	
2 years.....							1				1										2	
3 years.....					1		1					2				1					4	
4 years.....									1					1							3	
5 years.....	1													1							2	
6 years.....																					2	
7 years.....														1				1	1		3	
8 years.....																					3	
9 years.....																	1				1	
10-14 years.....				1								1					1	1		1	5	
15-19 years.....																			1		1	
Total.....	1	1	1	1	1	1	17	2	6	2	1	2	1	3	3	1	2	1	1	2	1	51

TABLE IX (concluded)
LOSS OR IMPROVEMENT IN WAGES AND TIME ELAPSING SINCE ACCIDENT—FEMALE

Time Since Injury	Loss per week \$6	No change	GAIN PER WEEK									Not re- ported	Total
			\$.50	\$1	\$1.50	\$2	\$2.50	\$3	\$4	\$4.50	\$5		
Less than 6 months.....	1	10	1	.....	.....	.....	.....	.....	.....	.....	.....	2	14
6 months-1 year.....	4	2	3	2	.....	.....	.....	1	.....	.....	.....	12
2 years.....	3	.....	.....	.....	3	1	.....	.....	1	.....	.....	8
3 years.....	1	.....	1	.....	1	.....	1	.....	.....	.....	.....	4
4 years.....	1	.....	1	.....	.....	1	.....	.....	.....	4
5 years.....	1	.....	.....	3
6 years.....	1	.....	.....	.....	1
7 years.....	1	.....	1	.....	.....	.....	.....	.....	.....	1
8 years.....	1	.....	.....	.....	3
9 years.....
10-14 years.....	1	.....	.....	.....	.....	.....	.....	.....	1
15-19 year.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	2
Total.....	1	18	4	6	4	6	1	1	3	2	.....	2	49

IMMEDIATE WAGE LOSS

TABLE X
CALCULATED LOSS OF WAGES WITHIN A YEAR FROM TIME OF ACCIDENT FOR SELECTED CASES ¹⁵

No.	Original rate	Time lost	Loss at old rate	Subsequent rate	Time since change	ON NEW BASIS		TOTAL OF BOTH	
						Loss	Gain	Loss	Gain
Male									
18	\$11 50	8½wk.	\$100 00	\$14 00	34½wk.	.....	\$90 70	\$10 00	.....
				12 00	8 wk.				
35	6 50	1 wk.	6 50	6 50	6 mos.	.....	.....	6 50	.....
72	19 00	.....	.....	10 00	1 wk.	9 00	.....	9 00	.....
27	12 00	4 wk.	48 00	9 00	4 wk.	.....	.....	12 00	.....
100	12 50	8¼4wk.	108 00	12 00	4 wk.	2 00	95 00	15 00	.....
				15 00	38 wk.				
97	11 00	1 mo.	45 00	12 00	13 wk.	.....	13 00	32 00	.....
96	11 00	8½wk.	95 00	12 00	45½wk.	.....	45 00	50 00	.....
49	8 00	7 wk.	56 00	8 00	.....	.....	.....	56 00	.....
9	6 50	9 wk.	58 50	6 50	9 wk.	.....	.....	58 50	.....
6	13 00	8½wk.	113 00	13 00	6 mos.	.....	.....	113 00	.....
39	12 00	8 wk.	96 00	17 50	48 wk.	.....	264 00	.....	\$168 00
75	8 00	.....	.....	6 00	8½wk.	17 00	173 00	.....	156 00
				12 00	43½wk.				
69	10 00	26 wk.	260 00	13 00	26 wk.	.....	78 00	182 00	.....
101	22 00	8½wk.	190 00	22 00	45½wk.	.....	.....	190 00	.....
94	13 00	17½wk.	225 00	14 00	34½wk.	.....	35 00	190 00	.....
60	18 00	14 wk.	252 00	18 00	38 wk.	.....	.....	252 00	.....
70	13 00	21½wk.	282 00	13 00	30½wk.	.....	.....	282 00	.....
1	14 00	14 wk.	196 00	12 00	38 wk.	76 00	.....	272 00	.....
13	12 00	26 wk.	312 00	12 00	26 wk.	.....	.....	312 00	.....
71	9 50	.....	.....	6 00	6 wk.	21 00	345 00	.....	324 00
				17 00	46 wk.				
24	9 00	34½wk.	312 00	6 00	17½wk.	53 00	.....	365 00	.....
50	18 50	52 wk.	962 00	.....	.....	.....	.....	962 00	.....
Female									
15	9 00	.....	.....	6 00	6 wk.	18 00	.....	18 00	.....
66	5 00	4 wk.	20 00	5 00	.....	.....	.....	20 00	.....
20	9 50	1 wk.	9 50	5 00	3 wk.	13 50	.....	23 00	.....
22	8 50	.....	.....	10 00	46 wk.	17 50	69 00	.....	41 50
				5 00	5 wk.				
16	12 00	4 wk.	48 00	6 00	3 wk.	18 00	.....	66 00	.....
17	7 00	10½wk.	73 50	6 00	2 wk.	2 00	.....	75 50	.....
26	7 00	17½wk.	121 00	8 00	34 wk.	.....	34 00	87 00	.....

If in the majority of this group, the earning capacity has not been impaired, yet nearly one-half of the men and one-seventh of the women suffered loss of wages for one year due to accidents, as Table X indicates. As an industrial phenomenon accidents, at least for this group, hold a position parallel to that of unemployment, in that they cause a temporary wage depression. Scrutinizing the total it will be seen that for 22 men, \$2,724 is the total net wage loss within the year of accident; \$52.40 is the total net wage loss in one week within the year of accident; \$2.40 is the average wage loss per person per week within the year of accident;

¹⁵ Those persons were selected whose records show complete wage data for a year following the time of injury. Among these are a number employed and injured at this trade within the current year. It is here assumed, however, that work was steady at the subsequent rate, and results are calculated on this basis.

\$12.36 is the average weekly wage per man within the year of accident; 19 plus per cent (approximately one-fifth), is the loss of average weekly rate due to accidents; and for seven women, \$248 is the total net wage loss within the year of accident; \$4.80 is the total net wage loss in one week within the year of accident; 69 cents average loss of wage per woman per week within the year of accident; \$8.37 average weekly wage within the year of accident; 8 plus per cent (approximately one-eighth) loss of average weekly rate due to accidents. The average loss per male is over-weighted by one man who lost 12 months' wages amounting to \$962.

In the following table a discussion of the net total loss or gains sustained through accident is involved.

TABLE XI
CALCULATED TOTAL NET LOSS OR GAIN SUSTAINED THROUGH ACCIDENTS WITHIN A YEAR
FROM TIME OF ACCIDENT FOR SELECTED CASES ¹⁸

Number	Loss of wage	Cost of medical attendance	Legal fees	Indemnities received	TOTAL NET	
					Loss	Gain
Male						
49.....	\$56 00	.....	.....	.....	\$56 00	.....
72.....	\$9 00	\$6 00	.....	.....	15 00	.....
71.....	21 00	2 00	.....	.....	23 00	.....
39.....	96 00	.....	.....	.....	96 00	.....
75.....	17 00	.....	.....	.....	17 00	.....
70.....	282 00	2 50	\$50 00	\$100 00	234 50	.....
1.....	272 00	14 00	.....	50 00	236 00	.....
69.....	182 00	25 00	.....	.....	207 00	.....
50.....	962 00	23 00	.....	2,100 00	.....	\$1,115 00
101.....	184 00	.....	.....	.....	184 00	.....
24.....	528 50	3 50	50 00	100 00	482 00	.....
9.....	58 50	6 50	25 00	50 00	40 00	.....
94.....	190 00	12 00	25 00	50 00	177 00	.....
18.....	99 00	5 50	50 00	225 00	.....	70 50
97.....	45 00	3 50	25 00	50 00	23 50	.....
35.....	6 50	1 50	.....	5 00	3 00	.....
27.....	12 00	.....	.....	36 00	.....	24 00
6.....	113 00	40 00	7 50	75 00	85 50	.....
96.....	66 00	25 00	.....	.....	91 00	.....
12.....	312 00	50 00	.....	500 00	.....	138 00
100.....	15 00	5 00	.....	10 00	10 00	.....
60.....	252 00	55 00	.....	.....	307 00	.....
Female						
15.....	18 00	.....	.....	35 00	.....	17 00
16.....	66 00	.....	.....	60 00	6 00	.....
20.....	23 00	.....	.....	.....	23 00	.....
22.....	17 50	1 50	.....	.....	18 50	.....
66.....	20 00	.....	.....	.....	20 00	.....
17.....	75 50	2 00	.....	80 00	.....	2 50
26.....	121 00	6 75	.....	100 00	27 75	.....

An analysis of the table shows that for 22 men, \$280 is the total cost of medical attendance; \$12.80 is the average cost per male for medical aid; \$232.50 is the total sum of lawyers' fees; \$10.60

¹⁸ See footnote 15, page 296.

is the average cost per male for lawyers' fees; \$3,351 are the total indemnities received; \$151.30 is the average indemnity per male; \$940 is the net total loss; \$42.72 is the net average loss per person; 82 cents is the net average loss per person per week; 6 plus per cent is the net loss of average weekly wage (over-weighted by the \$2,100 received by man for loss of hand); for seven women, \$9.75 is the total cost of medical attendance; \$1.39 is the average cost per person for medical aid; \$275 is the total indemnity received; \$39.36 is the average indemnity per person; \$75.75 is the total net loss; \$10.83 is the net average loss per woman; 21 cents is the net average loss per week per woman; 2½ per cent is the net loss of average weekly wage. In totaling the indemnity received by men, \$171 paid by Mutual Benefit Societies was omitted, for it is desirable to learn in how far the firm or the industry compensated the injured. Comparing 19 plus per cent loss average weekly wage with 6 plus per cent net loss of average weekly wage, it will be observed that 12 plus per cent of the average weekly wage loss for one year for males was made up by the Liability Companies. In the case of women the indemnity gotten from the firms fell short of about 2 per cent to equaling the percentage of loss of the average weekly wage for the year. It is a significant commentary that only \$2.25 more

INDEMNITY RECEIVED AND PRESENT COMPENSATION LAW

TABLE XII
SELECTED CASES OF INDEMNITY RECEIVED AND COMPENSATION ENTITLED TO UNDER NEW LAW¹⁷

No.	Loss	Average weekly wage	Compensation entitled to	Indemnity received	Difference between compensation and indemnity loss of dollars
<i>Male</i>					
70	Loss 1½ phalanges, index.....	\$12 50	\$383 33	\$100 00	\$283 33
1	1 phalanxe, index.....	12 55	192 45	50 00	142 45
50	Loss of hand.....	17 80	2,895 50	2,100 00	795 50
24	1½ phalanges, index.....	9 00	276 00	100 00	176 00
100	1 phalanxe, thumb.....	12 50	250 00	10 00	240 00
13	Loss use of forearm.....	12 00	2,496 00	500 00	1,996 00
60	2 phalanges, index.....	18 00	552 00	.....	552 00
95	1 phalanxe, index.....	7 00	107 33½	.....	107 33½
<i>Female</i>					
26	2 phalanges, index.....	7 60	233 00	100 00	133 00
16	1 phalanxe, second finger.....	9 50	95 00	60 00	35 00
83	1 phalanxe, fourth finger.....	7 50	37 50	.....	37 50
55	1 phalanxe, index.....	10 00	153 33½	.....	153 31½
80	2 phalanges, index.....	7 00	214 66½	.....	214 61½
45	1 phalanxe, index.....	6 50	99 67	.....	99 67

¹⁷ New York State Workmen's Compensation Law, p. 244-245.

was spent by males on medical aid than on lawyers, who usually demand half the indemnity as a fee. In half the cases where compensation was received injured workmen had to employ lawyers. With some exceptions medical aid was rendered by hospitals and dispensaries, where a nominal fee of ten cents was demanded. Some employers met all or part of the medical expenses.

A study of the above data is quite interesting. The accidents selected are those which have caused a loss of a member, for which a computation according to the new Compensation Law of the State of New York is simple. That we may see the discrepancy between indemnities received and the compensation which would be due under the new act, if effective at the time of accident. In no instances has the indemnity approached the compensation rating, and in many cases the employers have recognized no liability.

COMPENSATORY ELEMENT IN WAGE FOR HAZARDOUS EMPLOYMENTS

This study has shown the innately hazardous character of many types of machinery in the industry. Yet a comparison of hazardous with non-hazardous processes for the trade as a whole, shows that the median wage for women in hazardous and non-hazardous occupations is identical, lying somewhere between \$6 and 6.49.¹⁸ In the case of men the median wage for hazardous occupations is \$12 to \$12.99 as against \$9 to \$9.99 in non-hazardous. This difference is largely explained by the fact that the non-hazardous processes in which they are engaged are not peculiarly men's jobs — most of this kind of work being done by women — whereas the hazardous occupations consist very largely of cutting, a decidedly skilled branch in the work. It all points to what Mr. Newell, Mechanical Engineer for the New York State Department of Labor, has said, "Employers pay for skill rather than for hazards."

In conclusion it may be said that the following facts stand out in bold relief:

On the whole the accidents in this trade as seen through the 100 cases studied do not have a permanent effect on wages.

However, 38 per cent of this group as against 42 per cent in the metal trade were seriously injured.¹⁹

¹⁸ Third Report, Factory Commission, Appendix II. Report on the Paper Box Industry in New York City, p. 119.

¹⁹ Vol. XI. Employment of Women in the Metal Trades, p. 78.

Immediate loss in wages calculated for selected cases amounts to one-fifth of the average weekly wage for one year in the case of men, and one-eighth for women.

Loss in time through accidents has been great, averaging 49 days for men, 32 days for women, on the basis of the data given.

Certain machines are inherently hazardous and yet no compensatory consideration enters into the wages, unless a higher degree of skill demands it.

Accidents of most frequent occurrence are largely preventable.

But over and above all these considerations is the physiological and psychical effect upon the injured person, a factor not translatable in dollars and cents.

To start life with a maimed or deformed hand, to be gray at four and twenty, because an industry will not recognize its elementary obligations to the human machine, shows beyond doubt that the trade shirks its responsibilities.

V. THE CONFECTIONERY INDUSTRY IN NEW YORK STATE *

Extent.— According to the Census of 1910, during the preceding year, there was produced by factories in the United States nearly \$135,000,000 worth of confectionery — about nine pounds at 15 cents a pound for every man, woman and child in the country. Of the total amount, New York State produces nearly 19 per cent while 15 per cent was manufactured in New York City.

	United States	New York state	New York city
Number of establishments.....	1,944	249	127
Average number of wage earners.....	44,638	8,570	6,522
Total annual wages.....	\$15,615,000	\$3,079,000	\$2,373,000
Amount of capital.....	68,360,000	11,702,000	9,030,000
Cost of materials.....	81,151,000	15,644,000	12,395,000
Value of product.....	134,796,000	25,540,000	20,062,000

Employees.— The Industrial Directory † for 1912 reported 1,001 large and small confectionery and ice cream manufactories throughout the State, employing more than 12,000 persons, three-fourths of whom were found in New York City. To these we may add workers engaged in chocolate and cocoa establishments, which brings the number of employees engaged in these related trades in Greater New York above 10,000. Nearly half of these are women.

	NEW YORK STATE		NEW YORK CITY	
	Confectionery	Cocoa	Confectionery	Cocoa
Factories.....	1,001	10	758	7
Office force.....	553	62	421	51
Shop men, 16 + years.....	5,520	503	4,232	425
Shop boys, 14 — 15 years.....	45	3	35	.....
Shop women, 16 + years.....	5,755	264	4,432	169
Shop girls, 14 — 15 years.....	297	1	256	1
Total employees.....	12,170	833	9,376	646

* The material in this section has been revised to include all factory hands in confectionery establishments throughout the State. Much of the text, however, remains practically the same as it was presented in Appendix I of the Commission's Third Report, dealing with the industry in New York City only.

† Published by the New York State Department of Labor.

Growth.—The growth of the confectionery trade in this country has been very rapid within fifty years. The Census of 1840 first designated candy making as a separate industry. At that time the output for New York State was valued at \$386,000. During the next ten years machines were introduced and the output increased. Abundance of cheap sugar more than doubled the trade between 1880 and 1890. During the next ten years improved labor saving devices were invented and some of the larger factories were established. By 1910 the State of New York had fifty-one plants which together employed 6,800 wage earners and turned out annually products valued at over \$21,000,000. There is a tendency for such large incorporated establishments to increase. Small neighborhood shops are no longer considered in the Census.

Classification.—Candy manufactories may be divided into three groups according to the amount, character and disposition of their product. First, are the neighborhood shops with small equipments for turning out fresh goodies for local customers. Second, are the establishments that sell through their own stores and also manufacture specialties for the trade. Third, are the factories that turn out standard and cheap goods in large quantities for jobbers and dealers only. The price of goods and the character of the labor employed differ considerably among these groups. Because of the difficulty in reaching many employees scattered in the small shops, the first group has been omitted in this investigation.

Organization.—The organization of the factories also depends upon the nature of the product. Beside the office force, shippers and plant help, the factory proper is usually specialized into as many departments as the importance of the output requires. Thus, there may be separate units for making chocolates, bonbons and nougat, or batches of each may be turned out in one place. Each division is usually under a foreman with a superintendent in charge of the entire plant.

Workers.—Employees are usually obtained by an advertisement in the papers, by a sign on the door, or through friends in the business. Recommendations are required for the more responsible positions, but as the principal qualifications are neat-

ness, steadiness and strength, no special training is demanded. There is no regular system of apprenticeship. A period of practice is, however, required of hand chocolate dippers. A bright young helper learns by watching and practice how to perform an operation. She is then kept at this work and advances as she becomes proficient at it. There is thus considerable specialization of labor. Foremen and other responsible persons are generally secured by promoting old hands who have had good experience and who show ability to manage people.

Definition of Terms.—The term “confectionery” includes not only candy, but also chewing gum, popcorn cakes, licorice, prepared nuts, sugar pellets and materials for fine pastry. Cocoa products have been added in this survey because many candy factories make chocolate, and many chocolate mills turn out sugar confections.

Chocolate Making.—The process of making chocolate is comparatively simple and mechanical. Cocoa beans are roasted and shaken to remove the shells. The nibs are then ground fine and mixed with sugar and flavoring, after which the mass is poured into moulds. Men do the machine work; women are employed to clean and wrap the cakes.

Candy Making.—Candy making is as varied in process as the nature of the product requires. Hard candy is simply sugar or molasses cooked with flavoring material, and poured into moulds or pulled, shaped and cut. This is practically all men’s work, requiring some mechanical skill. For soft candy the fondant, or cream, is obtained by beating cooked syrup in machines until it is light and pasty. This filling is then poured by hand or machine into starch moulds and set aside to harden. The cheaper grades of bon-bons are preserved from drying out by being immersed in a sugar solution, which deposits a thin layer of crystals over the surface. Other creams are coated by dipping them into warm chocolate or other flavored pastes. Chocolate dipping by machine is unskilled work, but fork and hand dipping is a woman’s trade requiring deftness and practice. There are many other operations, such as coating jordan almonds in revolving pans, preparing nuts and making paste, sorting gums and much miscellaneous floor work.

Character of Occupations.—In general, it may be said that cooking, or “making” candy is a skilled trade in the hands of men. Machine tending which requires judgment is also a male occupation. Packing and wrapping require deftness and an eye for effect, which have made them distinctly women’s lines. But many of the semi-skilled workers, both male and female, who are put at various tasks as the demand arises, are scarcely to be distinguished from unskilled laborers, who do the heavier floor work and cleaning.

Factories Included.—For the following analysis 84 factories, employing nearly 9,800 persons, were taken in 11 cities and villages throughout the State. The establishments range in size from 6 to 857 employees, and include 7 chocolate mills, 5 chewing gum plants, 3 popcorn factories and 69 places where candy is made. This number comprises practically all the larger firms and represents the working conditions of over 76 per cent of all persons reported in the trade.

PERSONNEL

Of all persons employed as workers in local confectionery factories, 65 per cent are girls and women—a much larger proportion than in most industries. The following table shows also that three-fifths of the females are under twenty-one years of age. Here at once appear two reasons for low pay—feminine lack of aggressiveness and experience.

TABLE I
AGE AND SEX
NUMBER AND PER CENT OF EMPLOYEES IN EACH GROUP—NEW YORK CITY

AGE GROUPS IN YEARS	TOTAL		MALE		FEMALE	
	Number	Per cent	Number	Per cent	Number	Per cent
Total.....	8,337	100	2,894	100	5,443	100.
14-15.....	282	3.4	13	.5	269	5.
16-17.....	1,457	17.4	109	3.8	1,348	25.
18-20.....	2,022	24.2	425	14.8	1,597	29.
21-24.....	1,377	16.4	480	16.7	897	16.6
25-29.....	1,092	13.	468	16.3	524	9.8
30-34.....	588	7.	343	11.9	245	4.6
35-39.....	524	6.2	311	10.8	213	3.9
40-44.....	367	4.4	230	8.1	137	2.6
45-54.....	478	5.6	332	11.5	146	2.7
55-64.....	170	2.	180	4.5	40	.7
65+.....	34	.4	30	1.1	4	.1
Not given.....	46	.....	23	.....	23	.....

As to nativity, more than half of all factory workers were born abroad. Many more are of foreign parentage, but for these the returns are incomplete. Thirty-five different countries are represented. Table II shows that Italians lead all immigrants in this trade, especially the men, who number over three-fifths of the male working force. These facts may suggest another reason for low wages, namely: workers with a comparatively low standard of living.

TABLE II
NATIVITY OF EMPLOYEES BY SEX
NEW YORK STATE

	Male	Female	Both	Per cent of all
Total.....	2,804	5,443	8,337	100.
Native.....	527	3,448	3,975	48.
Foreign.....	2,296	1,886	4,182	50.
Italian.....	1,769	1,391	3,160	37.6
Russian.....	123	157	280	3.4
German.....	131	42	173	2.1
Austrian.....	81	60	141	1.7
Hungarian.....	60	19	79	.95
English.....	21	56	77	.92
Irish.....	9	46	55	.66
Canadian.....	12	27	39	.47
French.....	24	13	37	.44
Polish.....	23	10	33	.40
Scotch.....	11	17	28	.34
Roumanian.....	6	9	15	.18
Other foreign....	26	39	65	.78
Not given.....	71	109	180	2.

Table III shows the distribution of native and foreign employees by age groups. It should here be noted that young persons of native birth greatly outnumber foreign minors. This excess is due to the presence of more than 2,000 native girls — more than twice the number of young women from abroad. Foreigners in the trade, therefore, are somewhat older than the majority of native workers.

TABLE III
NATIVITY BY AGE GROUPS AND SEX
NUMBER AND PER CENT OF EMPLOYEES—NEW YORK STATE

AGE GROUPS	TOTAL				NATIVE				FOREIGN				NOT REPORTED			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Total.....	2,894	34.	5,443	66.	527	6.2	3,448	42.	2,296	27.	1,886	23.	71	0.8	109	1.
14-15.....	13	.1	269	3.2	10	.1	212	2.5	2	.....	55	.7	1	.....	2	.....
16-20.....	534	6.2	2,945	35.5	146	1.7	2,005	24.6	378	4.5	878	10.5	10	.1	62	.7
21 and over.....	2,325	27.6	2,206	27.	370	4.4	1,221	14.6	1,913	22.	949	11.5	42	.5	36	.4
Not reported.....	22	.3	23	.3	1	.01	10	.1	3	.....	4	.....	18	.2	9	.1

Conjugal condition is also important to consider in connection with wages, because it indicates the number of individuals who may be responsible for helping to support a family. Single persons often contribute toward the maintenance of others; but in the case of married people, it is reasonably certain that they work to keep up a home. We should expect to find a large number of unmarried women in industry, since they are not usually burdened with household duties. On account of the large number of young girls in the confectionery trade, we find that 76 per cent of all the female help are single. We should also expect to find married men predominant, because most men of working age are married.

The outstanding feature of the following table is the large number of unmarried persons. This fact suggests that because the trade is served in the main by young women, married folk with families dependent upon their earnings cannot readily compete.

TABLE IV
CONJUGAL CONDITION — NUMBER AND PER CENT OF FACTORY WORKERS

	TOTAL		SINGLE		MARRIED		WIDOWED OR DIVORCED		NOT GIVEN	
	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent	Num- ber	Per cent
Male.....	2,894	34	1,265	15	1,467	17.	53	.6	109	1.5
Female.....	5,443	66	4,149	50	730	9.5	262	3.2	302	3.2
Both.....	8,337	100	5,414	65	2,197	26.5	315	3.8	411	4.7

OCCUPATIONS

The following list shows the distribution of all employees by sex according to the general character of work performed:

NEW YORK STATE

	Male	Female
Confectionery workers.....	2,894	5,443
Plant help.....	527	45
Shipping and delivery.....	466	23
Office.....	225	165
Total.....	4,112	5,676

We shall here consider primarily those persons engaged in the processes of making and putting up confectionery and chocolate. The plant help, shipping force, office staff and others will be considered separately in following sections of the report.

Apart from the heat of cooking and the drudgery of carrying things about, making confectionery is not a very strenuous industry. That is, the pace is not so hot as in certain needle trades, nor the work so heavy as in machine and tool making. Piece workers, however, are kept pretty steadily at monotonous work, like sorting nuts. Chocolate dippers are subject to a temperature but slightly above 60 degrees F.; and floor helpers carry trays from warm rooms into coolers. But the figures available for sickness and death show workers in confectionery as a whole to be rather more healthy than the average for their age and sex. The materials used are wholesome. There is little dust except from the starch moulds. Most dippers and packers can sit at their work, and there is often time for others to rest between batches.

As previously remarked, candy making, pan work and operating heavy machines, are men's trades requiring some skill. Hand dipping and fancy packing are analogous lines for women. But the great body of machine and hand helpers who pick materials and clean products, who mould confections and carry trays, can scarcely be said to have a regular trade. Confining the enumeration to those engaged in manufacturing processes, the following table shows the number of persons whose occupations are given, classified according to age and sex.

It will be noted that nearly two-thirds of the operatives are females, and that comparatively few of these are highly skilled. The brighter girls begin as wrappers and learn to be fancy packers or try to become dippers. The less able carry trays or sort candy. A few boys who begin as helpers learn to run machines and to make candy. But the majority, after acquiring a certain dexterity, stick to that line for an increase in rate, or drop out of the industry. Not infrequently older people unsuited for very heavy work drift into the trade. In the making of chocolate, chewing gum and popcorn, the operations are comparatively few and mechanical, so that little training is required.

TABLE V
OCCUPATION BY AGE AND SEX
NUMBER AND PER CENT OF FACTORY WORKERS — NEW YORK STATE

AGE GROUPS IN YEARS	OCCUPATION																PER CENT OF TOTAL	
	FOREMEN AND FOREWOMEN		CANDY MAKERS		MACHINE OPERATORS		HAND AND FORK DIPPERS		PACKERS AND WRAPPERS		HELPERS		LABORERS		TOTAL		Male	Female
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male		
14-15.....	....	....	....	....	....	....	....	25	....	157	10	81	4	5	14	268	.5	4.9
16-17.....	....	2	1	....	....	2	196	196	2	829	96	290	8	27	109	1,345	3.8	24.9
18-20.....	....	19	13	2	8	7	325	325	24	942	329	288	45	12	426	1,569	14.9	29.4
21-24.....	4	47	67	....	20	4	205	205	4	461	331	173	41	6	474	896	16.6	16.7
25-29.....	25	48	63	....	30	6	126	126	7	249	303	88	34	5	465	522	16.8	9.6
30-34.....	40	37	47	....	29	3	60	60	3	92	179	52	37	1	337	245	11.8	4.5
35-39.....	29	26	58	....	26	1	49	49	5	76	169	58	20	2	308	212	10.8	3.9
40-44.....	40	14	38	....	21	2	17	17	....	35	106	69	28	7	228	134	8.	2.5
45-54.....	38	13	61	....	27	....	15	15	5	53	177	61	32	4	340	146	11.9	2.7
55-64.....	16	2	23	....	3	1	4	4	3	12	73	24	7	....	125	43	4.4	.8
65 and over.....	2	....	6	....	1	....	1	1	1	1	15	1	5	....	30	3	1.1	.05
Not reported.....	1	2	....	....	....	....	....	1	....	11	4	3	1	....	6	17	.....	.....
Total.....	195	210	377	3	165	18	22	1,024	54	2,918	1,792	1,178	257	69	2,862	5,420	100	100

As might be expected, the proportion of foreign born among the unskilled factory workers is large. The percentages vary in different plants, some being manned almost entirely by foreign labor. This is particularly true of chocolate mills and factories where the cheaper grades of confections are made. On the other hand some of the most skilled candy makers are foreigners. The following table shows the distribution by percentages:

TABLE VI
OCCUPATION BY NATIVITY
PER CENT OF ALL FACTORY WORKERS — NEW YORK STATE

	Total	Foremen and fore- women	Candy makers	Machine oper- ators	Dippers	Packers and wrappers	Helpers	General laborers
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Native.....	49	4	1.5	.5	8	25	9.5	0.9
Foreign.....	51	4	3.	1.5	4	11	25.5	3.
Total.....	100	8	4.5	2.	12	36	35.	3.9

RATES OF WAGES

Many hand dippers and fancy packers, and also a few less skilled operatives are paid on a piece basis. They constitute about 11 per cent of all workers. For these no rates can be given, since they vary with the character of the product. A good dipper will turn out over 100 pounds of chocolates per day; a deft packer will put up more than 150 one-pound boxes of mixed bon-bons. Sometimes a flat rate is made for an average task, and more is paid in proportion to output. In general, however, fixed time rates prevail in the confectionery trade. These are given by occupations in the following table. The cumulative per cents show the proportion which the sum of all numbers up to a given point bear to the total of the group.

The figures show that from \$8 to \$10 a week are the most common rates quoted for male workers, and that \$5 is most frequently designated for women and girls. The majority of male workers may expect to receive between \$8 and \$14; most girls and women are hired for from \$5 to \$7.50. Nearly half of all men and boys receive less than \$10, and more than half the females less than \$6.

TABLE VII
FACTORY WORKERS
NUMBER AND PER CENT OF EMPLOYERS AT SPECIFIED WEEKLY RATES, BY OCCUPATION AND SEX—NEW YORK STATE

WEEKLY RATES IN DOLLARS	OCCUPATION														WEEKLY RATES IN DOLLARS						
	FOREMEN AND FOREWOMEN		CANDY MAKERS		MACHINE OPERATORS		DIPPERS		PACKERS AND WRAPPERS		HELPERS		GENERAL LABORERS			NOT REPORTED		TOTAL		CUMULATIVE PER CENT OF TOTAL	
	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male	Male	Fe- male		Male	Fe- male	Male	Fe- male	Male	Fe- male
Less than \$3 00	1
\$3 00-\$3 49	18
3 50-3 99	3.4
4 00-4 49	9.5
4 50-4 99	21
5 00-5 49	41.8
5 50-5 99	52
6 00-6 49	66
6 50-6 99	71.8
7 00-7 49	79.5
7 50-7 99	83.2
8 00-8 99	89.7
9 00-9 99	94.2
10 00-10 99	97.2
11 00-11 99	98.4
12 00-12 99	99
13 00-13 99	99.1
14 00-14 99	99.2
15 00-15 99	99.4
16 00-17 99	99.6
18 00-19 99	99.8
20 00-24 99	99.9
25 00-29 99
30 00-34 99	100
35 00-39 99
40 00 and over
Not reported
Total	194	207	372	3	162	18	3	736	54	2,401	1,760	1,109	256	62	30	34	2,831	4,570	...	...	Total

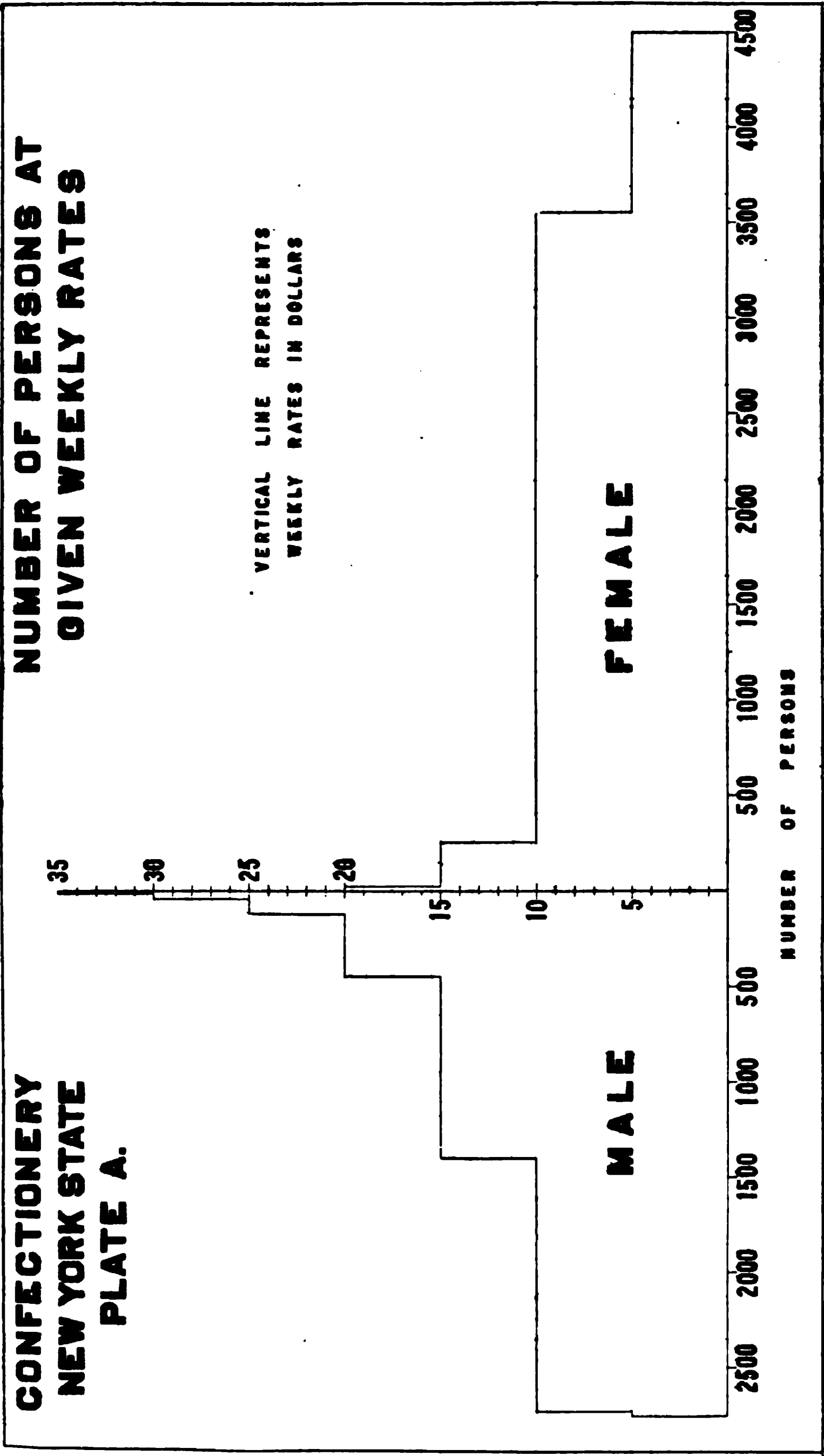
More specifically, the prevailing rates for foremen are from \$16 to \$25, and for forewomen, from \$8 to \$13.* The majority of experienced candy makers receive from \$12 to \$18. Good machine operators are to be had at \$11 to \$16. Most hand dippers get from \$5 to \$10, the better ones, \$8 and over. Packers and wrappers, who constitute the bulk of female employees, usually receive from \$5 to \$7; while the great mass of male helpers range from \$7 to \$12, and the less skilled women, from \$4.50 to \$6.50. All these rates vary greatly in different lines of work, according to the kind of service demanded. Thus retailing manufacturers require more skilled handworkers than those who make for jobbers only. On the other hand, heavy machinery requires more men workers, although comparatively few of them need be experienced confectioners. The accompanying graph shows the relative importance of \$5 wage groups for each sex.

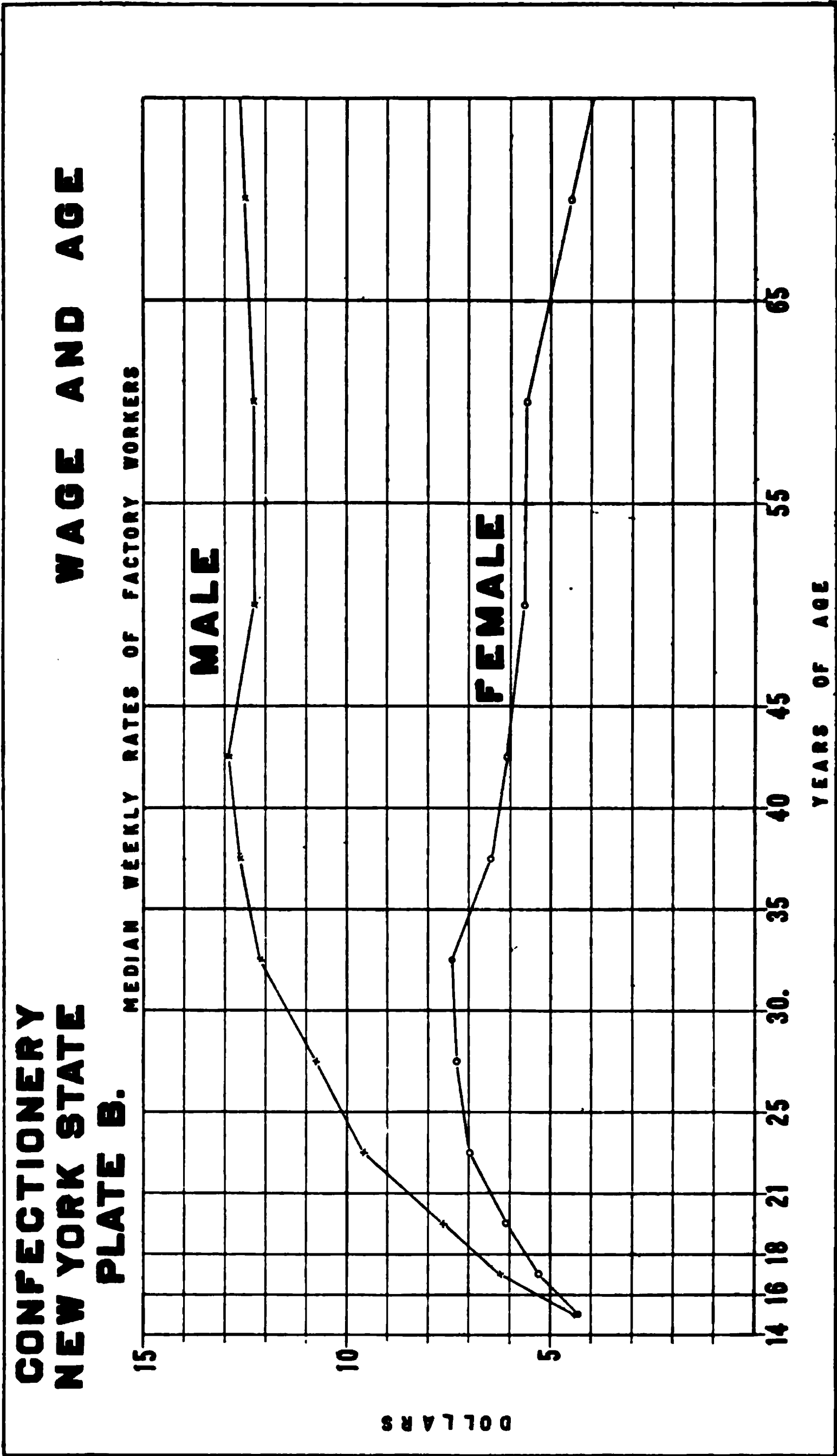
There are also great differences in wages for work that is apparently the same. Some firms pay consistently 25 per cent more than their rivals for similar operations. For instance, in one wholesale candy factory in New York City, no ordinary male laborer receives as much as \$8 per week; in another of the same general type, every such person receives over \$8. In the former plant no female packer receives as much as \$5.50 per week, nor any hand dipper as much as \$8. In the other establishment, the majority of women workers in such lines exceed these rates. These divergencies extend to machine processes of identical character. Difference in grade of product may in part explain such variations; but certain factories have the reputation of paying wages considerably below or above current rates.

Age differences may sometimes explain such divergencies. Naturally, the general experience and the steadiness of workers will affect their rate of pay. The accompanying graph shows the rate of payment above and below which half of all factory hands in each age group are found.† (See Plate B, p. 314.)

* In each case rates for the middle 50 per cent employed in a line has been taken to show the prevailing tendency, thus omitting extreme instances.

† The middle case in such a series is called the *median*, and furnishes a good type to show the central tendency of a group.





The appended table gives the same data for comparison. The majority of men never reach \$13, and the representative woman cannot make \$7.50.

TABLE VIII
FACTORY WORKERS
MEDIAN RATE OF WAGE BY AGE GROUPS—NEW YORK STATE

AGE GROUPS	Male	Female
14-15.....	\$4 40	\$4 31
16-17.....	6 23	5 28
18-20.....	7 64	6 09
21-24.....	9 57	6 99
25-29.....	10 76	7 30
30-34.....	12 11	7 41
35-39.....	12 62	6 46
40-44.....	12 89	6 07
45-54.....	12 27	5 63
55-64.....	12 28	5 58
65+.....	12 50	4 50

It will be noted that men attain their maximum rate between the ages of forty and forty-five; women, between thirty and thirty-five are paid highest. The rates of wages for adult women as a whole are little more than half those for men of the same age. The presence of so many unorganized women in this industry undoubtedly has a tendency to hold all wages down.

To sum up the matter of rates,—over half the minor male employees are paid less than \$7.50 a week; and nearly half the adult men factory workers receive less than \$11. More than two-thirds of the girls under eighteen are rated below \$5.50; and more than half the women shop hands above this age fail to achieve the \$6.50 rate. So much may suffice to indicate the general levels of wages in the industry.

ACTUAL EARNINGS

A more important matter is to find how much wage earners actually receive for their labor. To determine this, our investigators in New York City recorded the amount placed in the pay envelope of each employee for a week in October or late September, 1913. Up-state the figures were taken in May and June, 1914. In the former case the test was at a season when the candy industry was beginning to work full time and take on additional

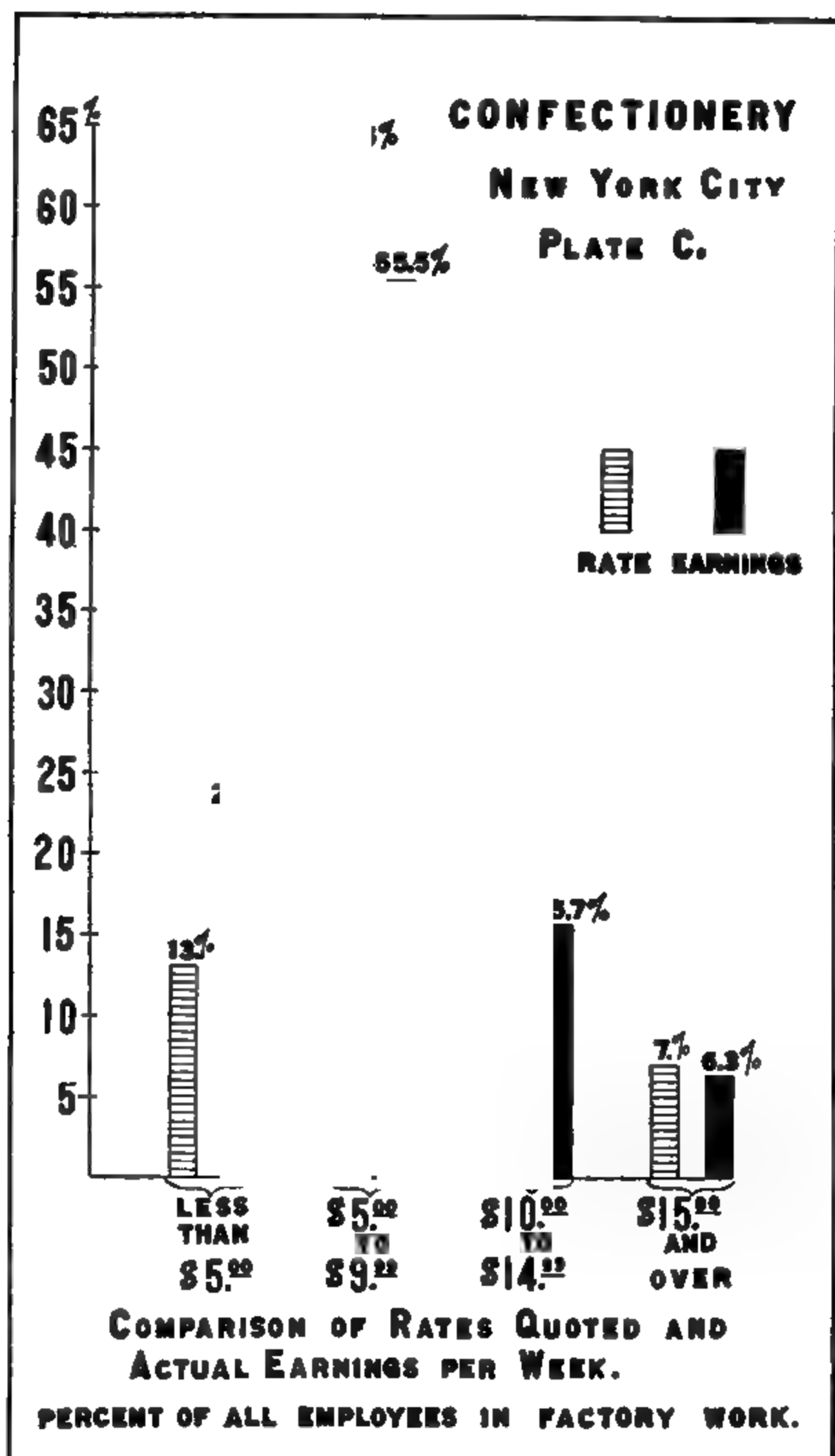
help in preparation for the Christmas rush. The time selected therefore was one showing the trade when business was active — not yet quite at its height, but well above the yearly average. Some new hands were undoubtedly being broken in, but the regulars were also beginning to make extra time or larger pay on increasing piece work. In the case of factories up-state, business was rather slack. But since the numbers taken last winter greatly outweigh those recorded in the spring, the trade as a whole is shown in a favorable light.

Table IX shows the number of persons receiving given earnings according to sex and occupation and also the per cent of each sex earning up to and including the specified amounts. At first glance this distribution appears very like that shown in the preceding table for rates; but comparison reveals certain differences in the proportion of all workers who fall within each income group. According to rates quoted, only 13 per cent of the employees were rated under \$5. But according to actual earnings, 22.5 per cent of all whose receipts were noted fell below that amount. On the other hand, 63.5 per cent might have been expected to receive more than \$5 and less than \$10. As a matter of fact, only 55.5 per cent actually received sums between these amounts. For amounts over \$10, the proportions based on earnings are also slightly lower than those based on rates. (See Plate C, p. 318.)

The reasons for this falling in earnings are not far to seek. The better paid employees are salaried persons whose income does not vary greatly on account of slack work or short absences. On the other hand the low paid employees are docked for absence, or are not paid the full amount if their output falls below standard. In one place girls are not paid for any time less than one week. As the rates are low, many soon become discouraged and leave. Thus the firm gets some work for nothing.

TABLE IX
FACORY WORKERS
NUMBER AND PER CENT OF EMPLOYEES CLASSIFIED ACCORDING TO ACTUAL WEEKLY EARNINGS, BY OCCUPATION AND SEX — NEW YORK STATE

[illegible]



DAYS WORKED

An important factor in determining earnings is the length of time worked. Many employees received less than the prescribed rate because they did not work a full week. The following table shows the days credited (by 67 firms) to 6,362 factory employees:

TABLE X
DAYS WORKED
NUMBER AND PER CENT OF FACTORY EMPLOYEES — NEW YORK STATE

	TOTAL		NUMBER OF PERSONS WORKING GIVEN NUMBER OF DAYS								
	Persons	Days	-1	1	2	3	4	5	6	7	Average days
Male.....	2,141	12,143	..	24	29	31	73	279	1,654	51	5.67
Female.....	4,221	23,157	1	110	60	114	194	646	3,094	2	5.48
Total...	6,362	35,300	1	134	89	145	267	925	4,748	53	5.54
Per cent of total workers .....			..	2.1	1.4	2.3	4.2	14.5	74.7	.7	.....

It will be seen that while 75 per cent of the persons recorded worked a full week, the rest lost time sufficient to make the average for all a little over five and a half days. Reasons for absences are not recorded, so we do not know if they were due to illness or to celebrations. Over 1,100 female employees lost a day or more. On the other hand, 51 men and 2 women worked an extra day, or were credited with that much overtime. Engineers and mechanics very often make repairs on Sunday. In some cases employees do cleaning or watch the completion of some process on the Sabbath. In one establishment a man was registered as a candy maker for six days and as a watchman on the seventh. It is only fair to state that all but one of these cases were found in New York City during the busy season.

HOURS

Practically all factories run from 50 to 60 hours a week, allowing the legal 54 hours for women and for boys under 18 years, and 48 hours for children under 16. A few employers, however, frankly admit to exceeding these limits for young persons and female workers. In the busy season men are often kept an hour or two at night three times a week or every day.

The usual daily hours are 10 for men, 9 for women and 8 for children. Most firms (38 out of 56 reported) allow one short day a week. This varies from 5 hours to 8 or 9. In the majority of cases, 30 minutes is given for lunch. In 26 places an hour is allowed for women and children. In 19 factories lateness is fined at varying rates—a half-hour's pay for tardiness of 5 or 10 minutes being specified in 5 cases.

The hours actually worked in the week selected for taking wage payments are here shown for factory workers in 67 plants. In many cases the hours were obtainable only by consulting the slips or sheets from the time clock. In few places was entry made of hours for piece workers.

TABLE XI
HOURS PER WEEK
NUMBER AND PER CENT OF FACTORY WORKERS BY AGE AND SEX—NEW YORK STATE

HOURS	AGES									
	14-15		16-17		18 and over		Total		Per cent of total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Total.....	13	224	81	1,089	2,384	3,136	2,478	4,449	100	100
48 and under.....	11	197	19	339	223	780	253	1,316	10.2	29.5
Over 48 to 54.....	1	27	27	727	301	2,268	329	3,022	13.3	68.
Over 54 to 60.....	1	....	27	9	1,302	59	1,330	68	53.5	1.5
Over 60 to 66.....	....	....	3	13	298	8	301	21	12.3	.5
Over 66 to 72.....	....	....	4	1	206	21	210	22	8.5	.5
Over 72.....	....	....	1	....	54	....	55	....	2.2	....

It will be noted that according to these entries during one week, 88 women and 23 girls worked more hours than allowed by law; 29 children exceeded 48 hours, and 35 males under 18 years went over the 54-hour limit. Only 15 of these violations were found up-state. The following table shows the actual amount of overtime. In computing this, the full time for men according to the usage of the factory was taken as a basis for counting extra hours for males over 18; for women and minors, the limit fixed by law was used. These facts were noted in 63 plants employing 4,626 persons, about equally divided as to sex.

TABLE XII
PERSONS WORKING OVERTIME
NUMBER AND PER CENT — NEW YORK STATE

	Total per- sons	HOURS OVERTIME IN ONE WEEK											
		Less than 1	1	2	3	4	5	6	7-9	10-12	13-15	16-18	19 and over
Male.....	635	31	64	83	35	31	71	39	98	122	43	7	11
Female.....	74	.....	20	33	3	.....	1	10	4	3	.....	.....	.....
Both.....	709	31	84	116	38	31	72	49	102	125	43	7	11
Cumulative per cent of all.....	100	4.4	11.8	16.3	5.4	4.3	10.2	6.9	14.4	17.6	6.1	1	1.5

NOTE.— Of these, 7 men and 13 women are reported from up State factories.

From these figures we calculate that about 4,400 hours overtime were worked in one week by the persons noted. The men averaged about 6.5 hours; the women rather less than half that number (about 3 hours each). This time is ordinarily paid for at the usual rate.

Obviously there are more hours lost than worked overtime during the course of a year. The changing seasonal demand for candy and the perishable character of the finer confections explain some fluctuations in working time. Moreover, during the hot months it is difficult to manipulate sticky masses of melted sugar. A few factories run only part time in the summer.

SEASONAL FLUCTUATIONS

The yearly rise and fall of the confectionery trade in the State is shown graphically on the accompanying chart (Plate D). We note that, for the 45 firms in New York City and 16 firms up-state, in operation throughout the year considered, the maximum number of employees, in November, 1912, was over 9,700. The minimum number employed, in the first part of July, 1913, was about 7,100. The annual displacement of workers amounted, therefore, to 27 per cent of the full quota.

As for wage payments, indicated on the chart by the broken lines, the difference week by week was much greater than the variation in number of employees, and this is particularly true

of the extreme fluctuations. The maximum amount paid as wages in any one week was \$79,000, during December, 1912. The lowest weekly total (disregarding the Christmas–New Year holiday period) was \$52,600, during the first week of July, 1913. The drop from the highest to the lowest payment was 34 per cent while the two extremes were respectively 25 per cent above and 18 per cent below the average for the year.

The following table presents the main facts regarding fluctuations brought out in the chart.

TABLE XII. A
EMPLOYMENT AND WAGES

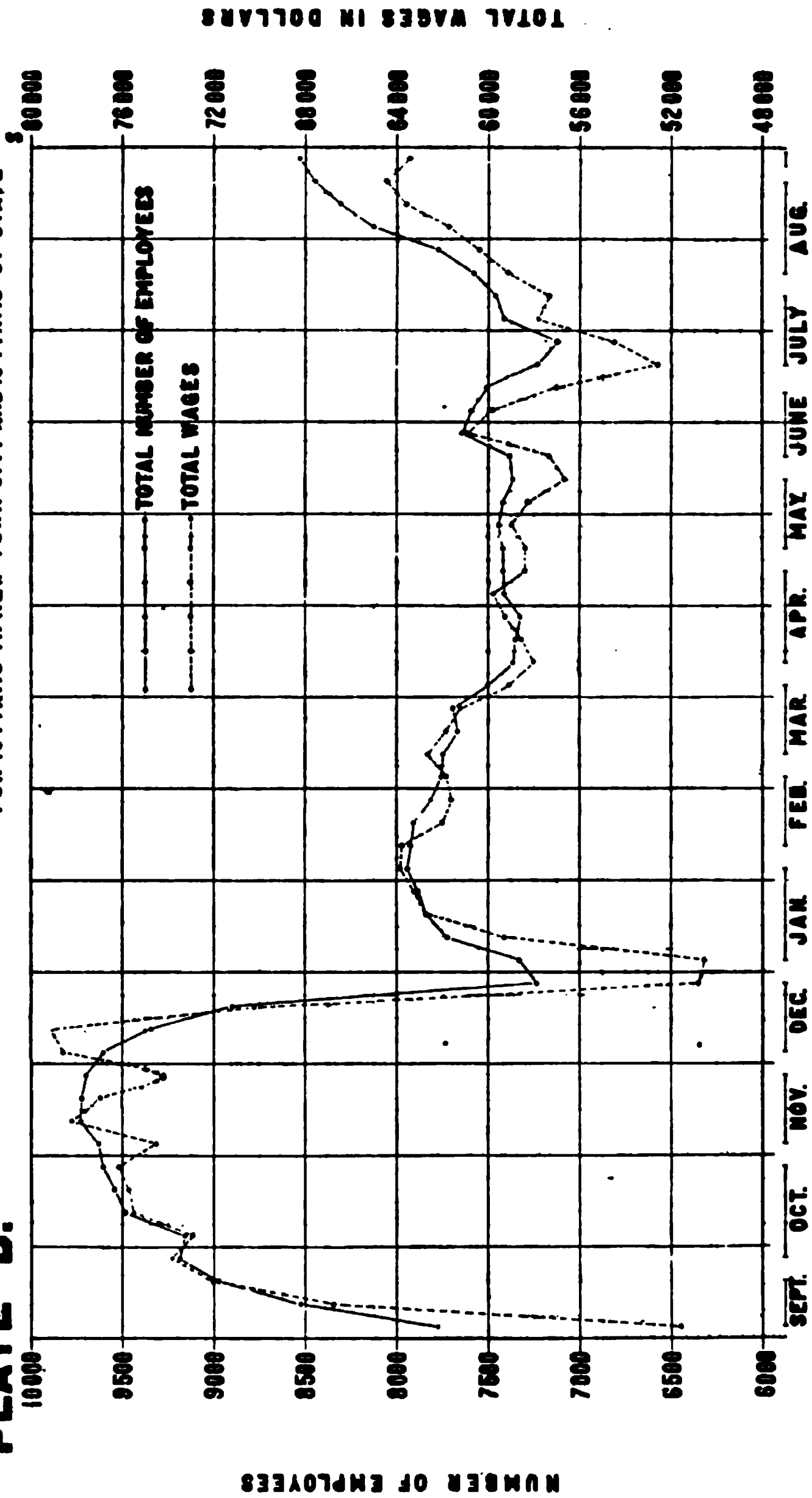
	Number of employees	Weekly wage payments
Average.....	8,100	\$63,400
Maximum.....	9,720	79,004
Minimum.....	7,123	52,611
Increase of maximum over average.....	20%	25%
Increase of maximum over minimum.....	37%	50%
Decrease of minimum below average.....	12%	18%
Decrease of minimum below maximum.....	27%	34%

The chart also shows very strikingly the drops in wages paid during weeks that include a holiday. Thus, in the fall of 1912, there are instances of decreases of total wages even while the total number of employees is increasing. There is a drop in the total wages paid for the fifth week, owing to Columbus Day, generally observed by Italian workers who form an important element in the personnel of the industry; a sharper drop for the ninth week, owing to Election Day; and a very large decrease for the twelfth week, which includes Thanksgiving Day, which is taken advantage of by many workers to rest until the following Monday. The largest reduction both in number of employees and in wages paid occurs during the Christmas season. Decoration Day, in the thirty-eighth week; July 4th, in the forty-third week; and Labor Day, in the fifty-second week of the calendar year charted, all show appreciable decreases in wage payments, even though the total number of employees remains the same or is actually increasing.

**CONFECTIONERY
NEW YORK STATE
PLATE D.**

NUMBER OF EMPLOYEES AND TOTAL WAGES

WEEK BY WEEK FOR ONE YEAR COMMENCING SEPTEMBER 9, 1912.
FOR 45 FIRMS IN NEW YORK CITY AND 16 FIRMS UP-STATE



111
100
4014

SHIFTING

The fluctuation of the confectionery trade at once suggests the query as to steadiness of employment. Many persons work during the busy season only, and comparatively few remain the entire year. The data on which the following table is based show that of 3,138 workers appearing on the payrolls of 10 establishments in New York City within a year, only 629, or 20 per cent, had been in the employ of the firms for more than 10 months. Only 530 (16.9 per cent) had been steadily employed from 49 to 52 weeks. Sixty per cent were engaged 3 months only, and more than 40 per cent less than 5 weeks.

A similar analysis for factory workers only shows them to be slightly more temporary than the foregoing data indicate. Girls are more numerous and less permanent in tenure than men. Voluntary vacations play a very small part in the year's employment, since most factories don't give them to ordinary shop hands.

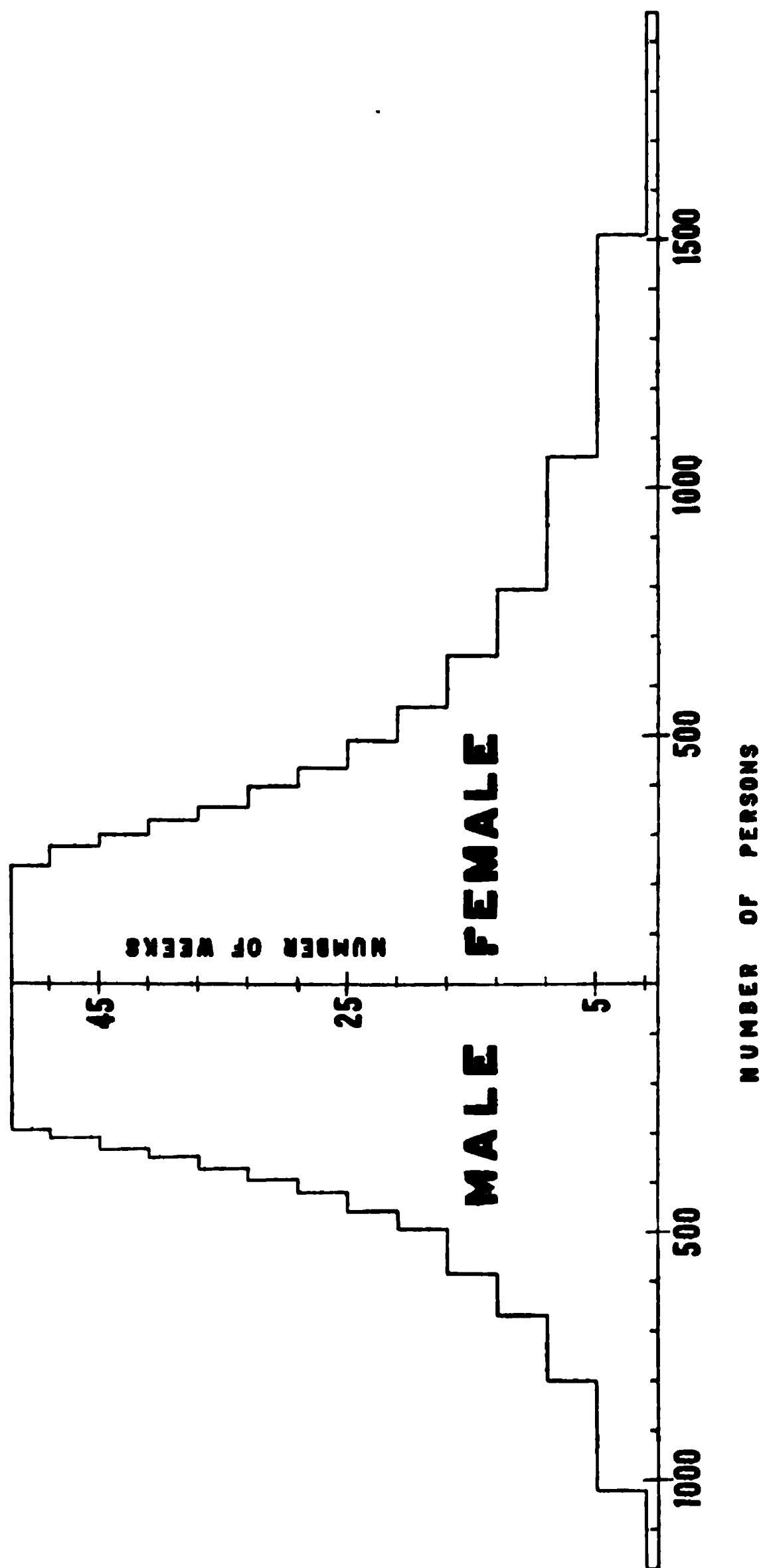
The factories from which these records were taken ordinarily employ from 719 to 1,390 people according to season. The average forces amount to about 953. The extent and rapidity of the shifting is therefore at once apparent.

TABLE XIII
NUMBER AND PER CENT OF EMPLOYEES WORKING GIVEN NUMBER OF WEEKS IN ONE YEAR —
NEW YORK CITY

WEEKS WORKED	Male	Female	Total	Cumula- tion Per cent
1 or less.....	160	447	607	19.4
2- 4.....	220	447	667	40.7
5- 8.....	133	267	400	53.5
9-12.....	88	131	219	60.5
13-16.....	88	105	193	66.6
17-20.....	36	69	105	69.9
21-24.....	38	55	93	72.9
25-28.....	26	38	64	74.9
29-32.....	22	42	64	76.9
33-36.....	26	27	53	78.6
37-40.....	15	29	44	80.0
41-44.....	22	23	45	81.4
45-48.....	14	40	54	83.1
49-52.....	294	236	530	100.0
Total.....	1,182	1,956	3,138	100.0

**CONFECTIONERY
NEW YORK STATE
PLATE E.**

**NUMBER OF PERSONS WORKING
GIVEN NUMBER OF WEEKS
IN ONE YEAR**



ANNUAL EARNINGS

For those who had worked steadily, the earnings for every week during a year were tabulated. The records in many establishments did not admit of tracing the entire working force for a period of 12 months. In the case of 12 firms in New York City, this was possible, and from payrolls including 1,528 factory hands employed at the time of the investigation, 571 persons were selected who had worked for a period of at least 10 months, during the preceding year. Their actual annual earnings for this period varied from below \$200 to over \$1,600. The men centered at about \$550; the women between \$300 and \$350.

Upon this basis, the median weekly income for men would be about \$11, and slightly above \$6 for women.

Comparing these figures with the actual earnings of persons in the same establishments during a week in October, 1913, we find that the annual averages are somewhat higher. It must be remembered, however, that the persons on the payrolls for a year are the better employees whose skill or steadiness has led the firms to retain them. The proportion of foremen, candy makers and better paid operatives taken is, therefore, much higher than their usual quota in the establishments. Their average would naturally be above those of their fellows who were soon replaced. The totals are, accordingly, about 11 per cent above the general level of income, without allowing for time lost by those not steadily employed. Moreover, the level of wages in the establishments taken was slightly higher than that in the trade as a whole.

It is important here to note that annual wages for these same persons, when calculated at 52 times their average weekly earnings, range about \$50 below their income when computed as 52 times their last rate of payment. But we have just remarked that these are the steadier and better paid employees. It is, therefore, manifestly unfair to estimate the income of employees from rates quoted for steady workers.

TABLE XIV
TOTAL ANNUAL EARNINGS BY OCCUPATION AND SEX
NUMBERS AND PER CENT OF FACTORY WORKERS RECEIVING SPECIFIED AMOUNTS -- NEW YORK CITY

	FOREMEN AND FOREWOMEN		CANDY MAKERS	MACHINE OPER-ATORS	DIPPERS	PACKERS AND WRAPPERS		HELPERS		GENERAL LABORERS		TOTAL		CUMULATIVE PER CENT OF	
	Male	Female	Male	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	All males	All females
Total.....	25	25	41	18	94	4	214	81	44	18	7	187	384	100	100
Earnings															
Under \$200.....	.....	.....	.....	.....	.....	.....	6	.....	5	.....	.....	.....	11	.....	2.9
\$200- \$249.....	.....	.....	.....	.....	.....	.....	52	.....	11	.....	1	.....	64	.....	19.5
250- 299.....	.....	.....	.....	.....	5	.....	67	.....	17	.....	1	.....	90	.....	43.
300- 349.....	.....	2	.....	.....	13	.....	36	8	7	.....	.....	8	53	4.3	53.1
350- 399.....	.....	1	2	.....	15	.....	37	11	3	1	.....	14	57	11.8	72.9
400- 449.....	.....	4	2	1	15	.....	11	14	1	2	.....	19	31	21.9	81.
450- 499.....	.....	5	2	1	23	1	.....	14	.....	2	.....	20	28	32.6	88.3
500- 549.....	.....	3	1	3	17	.....	4	12	.....	7	4	23	28	44.9	95.6
550- 599.....	.....	1	6	2	5	1	.....	11	.....	1	.....	21	6	56.1	97.1
600- 649.....	.....	2	1	2	1	1	.....	8	.....	2	.....	14	3	63.6	97.9
650- 699.....	1	1	5	4	.....	1	.....	3	.....	2	.....	16	1	72.2	98.2
700- 749.....	1	2	7	3	.....	.....	.....	.....	.....	.....	.....	11	2	78.1	98.7
750- 799.....	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	80.2	.....
800- 899.....	1	2	7	1	.....	.....	1	.....	.....	.....	.....	9	3	85.	99.5
900- 999.....	4	1	2	1	.....	.....	.....	.....	.....	1	.....	8	1	89.3	99.7
1,000-1,099.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	.....	92.	.....
1,100-1,199.....	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	3	1	93.6	100.
1,200-1,299.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	94.7	.....
1,300-1,399.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	96.8	.....
1,400-1,499.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	98.4	.....
1,500-1,799.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	100.	.....

It is patent from the following table that the steadier hands are the better paid. Those who stick by their job rise quite steadily month by month as shown below. The fluctuations are probably due to the fact that a few higher paid persons or a number of low paid hands happened to come on at about the same time.

TABLE XVI
AVERAGE WEEKLY EARNINGS BY NUMBER OF WEEKS WORKED — NEW YORK CITY

WEEKS WORKED	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	15	.5	\$3 52	170	12.4	\$1 72
1- 4.....	50	15.2	5 30	259	31.2	3 98
5- 8.....	33	22.8	6 80	175	43.8	4 33
9-12.....	30	30.	7 25	76	49.5	4 35
13-16.....	28	36.4	6 50	74	54.8	4 93
17-20.....	5	37.6	7 37	47	58.3	4 54
21-24.....	15	41.2	8 08	44	61.5	4 75
25-28.....	9	43.2	8 12	35	64.	5 64
29-32.....	14	46.5	8 00	41	67.	5 25
33-36.....	11	49.	9 25	21	68.5	5 15
37-40.....	8	50.9	10 00	27	70.5	5 04
41-44.....	11	53.5	8 87	36	72.8	5 75
45-48.....	18	57.7	8 50	63	77.7	5 54
49-52.....	181	100.	11 77	307	100.	6 35
Total.....	428	.....	.....	1,375	.....	.....

Table XVII gives the average weekly earnings of all factory workers on the current payrolls of the factories just considered. The amounts were obtained by dividing the total payments credited to these persons by the firm during the preceding twelve months, by the number of weeks they had been employed in the establishment. The figures show, on comparison with those on Table XV, that the amounts received by those workers who had been employed but a short time bring down the general level of earnings below that attained by the steady workers, and indicate that average receipts are less than those found for a representative week.

TABLE XVII
FACTORY EMPLOYEES
NUMBER AND PER CENT OF EMPLOYEES CLASSIFIED ACCORDING TO AVERAGE WEEKLY EARNINGS, BY OCCUPATION AND SEX—NEW YORK CITY

AVERAGE WEEKLY EARNINGS IN DOLLARS		OCCUPATION														AVERAGE WEEKLY EARNINGS IN DOLLARS					
		FOREMEN AND FOREWOMEN		CANDY MAKERS		MACHINE OPERATORS		DIPPERS		PACKERS AND WRAPPERS		HELPERS		GENERAL LABORERS				TOTAL		CUMULATIVE PER CENT OF TOTAL	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female			Male	Female	Male	Female
Less than \$3 00.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Less than \$3 00
\$3 00-\$3 49....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	\$3 00-3 49
3 50-3 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3 50-3 99
4 00-4 49....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4 00-4 49
4 50-4 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4 50-4 99
5 00-5 49....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5 00-5 49
5 50-5 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5 50-5 99
6 00-6 49....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6 00-6 49
6 50-6 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6 50-6 99
7 00-7 49....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7 00-7 49
7 50-7 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7 50-7 99
8 00-8 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8 00-8 99
9 00-9 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9 00-9 99
10 00-10 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10 00-10 99
11 00-11 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11 00-11 99
12 00-12 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	12 00-12 99
13 00-13 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	13 00-13 99
14 00-14 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14 00-14 99
15 00-15 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15 00-15 99
16 00-17 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16 00-17 99
18 00-19 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	18 00-19 99
20 00-24 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	20 00-24 99
25 00-29 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	25 00-29 99
30 00-34 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	30 00-34 99
35 00-39 99....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	35 00-39 99
40 00 and over.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	40 00 and over
Not reported....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Not reported
Total.....	30	23	43	1	29	4	1	80	24	621	188	255	61	2	376	985	....	....	....	Total

EXPERIENCE

Table XVIII shows the correlation between age and experience for both sexes. Data not here presented show that most males engaged in the confectionery industry work pretty steadily from the age when the law allows. The women too are wage earners until about 30, when domestic cares doubtless claim the energies of most. They then rapidly withdraw, until, after middle age, incapacity on the part of the principal wage earner or other family necessity sends some back into industry, for perhaps 10 years longer. Then they rapidly drop out.

Experience in the confectionery industry follows the same general course, save that the time in this trade is shorter — roughly half the working years — showing conclusively that many of the older workers had been engaged in other lines before taking up their present occupation. A similar statement applies to time with the firm where found. Most seasoned confectionery workers had had about half their experience elsewhere.

TABLE XVIII
YEARS OF EXPERIENCE (MEDIAN) BY AGE
ALL FACTORY EMPLOYEES — NEW YORK STATE

AGE GROUP	IN TRADE				WITH FIRM			
	Male		Female		Male		Female	
	Years	Months	Years	Months	Years	Months	Years	Months
14-15.....	.....	.10	.....	8	.....	.10	.....	7
16-17.....	.....	.8	.....	10	.....	.8	.....	9
18-20.....	1	2	2	10	.....	.10	1	5
21-24.....	2	5	4	4	1	5	2	9
25-29.....	3	9	6	4	1	8	3	6
30-34.....	5	9	6	6	3	1	2	10
35-39.....	8	.....	5	4	4	10	2	6
40-44.....	11	2	3	2	5	10	2	2
45-54.....	11	6	3	6	5	1	2	3
55-64.....	20	8	3	4	7	8	3	3
65 and over.....	27	6	.....	.8	13	.....	.....	.4

Only 3 women over 65 here recorded.

Length of time in the trade or with the firm also has a bearing upon earnings. Ordinarily we should expect those who had been in the business for several years to be more valuable workers than newcomers. And their usefulness would normally increase until advancing age slackens their energy. The following tables and graph show the number of persons enumerated according to years of experience in confectionery and with the firm where found. They also show the wage above and below which half the people in each year group are distributed.

TABLE XIX
EARNINGS AND TRADE EXPERIENCE
NUMBER AND PER CENT OF ALL EMPLOYEES BY YEARS IN TRADE, AND MEDIAN WEEKLY EARNINGS—NEW YORK STATE

YEARS OF EXPERIENCE	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	721	25.4	\$7 37	1,938	36.5	\$4 85
1.....	381	38.8	8 69	806	52.3	5 64
2.....	198	45.8	8 80	604	63.7	6 07
3.....	174	52.	10 30	456	72.2	6 45
4.....	161	57.7	10 68	292	77.8	7 06
5.....	128	62.2	10 68	191	81.5	7 29
6.....	111	66.1	11 08	172	84.6	7 69
7.....	113	69.7	12 28	140	87.5	8 16
8.....	97	73.4	11 85	144	90.	8 29
9.....	62	75.7	14 33	70	91.5	8 25
10-14.....	258	85.	14 02	264	96.5	8 71
15-19.....	107	88.5	14 50	112	98.5	9 65
20-24.....	151	94.	15 59	49	99.4	10 72
25-29.....	72	96.4	16 45	17	99.8	8 52
30-34.....	52	98.3	19 10	4	99.9	6 50
35-44.....	41	99.4	15 88	6	100.	7 50
45 and over.....	15	100.	15 12	.....	.....	.....
Total.....	2,842	.....	.....	5,265	.....	.....

TABLE XX
EARNINGS AND TERM OF EMPLOYMENT
NUMBER AND PER CENT OF ALL EMPLOYEES BY YEARS WITH FIRM, AND MEDIAN WEEKLY EARNINGS—NEW YORK STATE

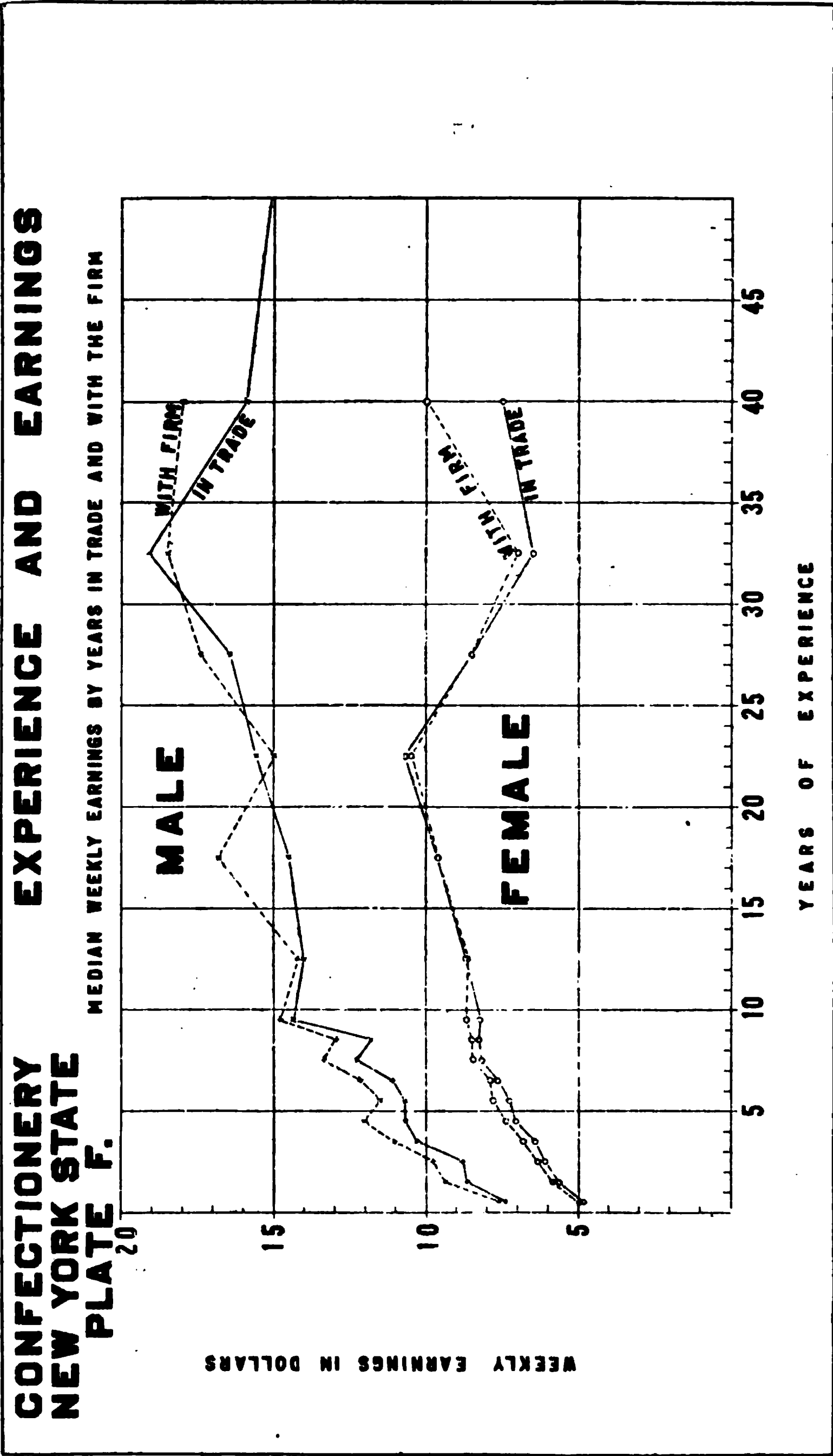
YEARS WITH FIRM	MALE			FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	1,005	35.2	\$7 63	2,424	45.2	\$4 94
1.....	383	48.8	9 40	877	61.8	5 83
2.....	225	56.5	9 78	563	72.3	6 33
3.....	199	63.5	11 02	410	79.8	6 80
4.....	152	69.2	12 04	253	84.5	7 37
5.....	131	73.8	11 46	155	87.5	7 79
6.....	98	77.4	12 15	134	90.	7 89
7.....	93	80.5	13 38	117	92.1	8 48
8.....	81	83.4	12 96	92	93.8	8 50
9.....	56	85.5	14 80	55	95.	8 68
10-14.....	199	92.3	14 22	181	98.2	8 66
15-19.....	83	95.1	16 85	52	99.2	9 64
20-24.....	80	98.	15 00	26	99.7	10 50
25-29.....	33	99.2	17 40	7	99.8	8 50
30-34.....	17	99.7	18 50	2	99.9	7 00
35-44.....	8	100.	18 00	2	100.	10 00
45 and over.....	.....	.....	.....	.....	.....	.....
Total.....	2,843	.....	.....	5,850	.....	.....

As shown by Table XIX, half the men do not get \$11 until they have been 6 years in the business, nor \$15 until after 20 years. Half the women do not attain \$7 until after four years of experience, nor \$8 until after seven years of work. Less than 4 per cent stick long enough to put their median earnings above the last figure.

It will be noted that 33 per cent of all employees had been in the confectionery business less than a year, and over 57 per cent less than 3 years. The girls are much briefer in their stay than the men. Less than 9 per cent of the women had been in the trade 10 years or more, whereas more than 24 per cent of the men had been in the business so long. Naturally the terms of employment with the firm are of shorter duration. More than half had been in the establishment where found less than two years. This brief connection may also partly account for low wages.

Tables XIX and XX also show the middle wage for each group of persons working a given number of years. From the data presented in the foregoing analysis of age and experience, certain general conclusions as to progress in earning capacity may be drawn. It is reasonably sure that a person who has been engaged for seven years in this industry is no longer a minor; and he or she is probably over 30 years of age, having come into the confectionery trade after attaining majority. The progression of earnings with experience is shown in the tables. It is interesting to note that after 7 years' work in this line, the ordinary man earns about \$13, and the run of women less than \$9. Those who stick to the firm fare a little better, especially in the case of beginners and also a few old employees, some of whom are retained virtually as pensioners.

It may perhaps strike the reader that we have confused the relation between experience and earnings by lumping together all sorts of help from foremen to laborers. In order to find whether the relatively skilled occupations show similar tendencies, we herewith present a parallel treatment of the data for



the male candy makers and female hand dippers — the most skilled lines in the trade. A comparison of this table with the last one shows no marked differences, but only a slightly higher level for women. Of course, we do not know just how many years these persons have been making candy or dipping chocolates, but the majority of women cannot pass \$10 after any number of years experience, nor do the run of candy makers ever get more than \$17.

TABLE XXI
MEDIAN EARNINGS AND TIME IN TRADE OF SKILLED WORKERS — NUMBER AND PER CENT BY YEARS IN TRADE, AND MEDIAN WEEKLY EARNINGS — NEW YORK STATE

YEARS IN THE TRADE	CANDY MAKERS — MALE			DIPPERS — FEMALE		
	Number	Cumulative per cent	Median earnings	Number	Cumulative per cent	Median earnings
Less than 1.....	11	3.3	\$9 50	155	15.6	\$4 94
1.....	8	5.7	10 25	120	28.	5 95
2.....	7	7.8	7 88	131	41.	6 97
3.....	11	11.1	11 50	120	53.	7 13
4.....	16	15.8	12 50	79	61.	8 40
5.....	16	20.6	13 00	44	65.6	8 38
6.....	22	27.2	13 50	49	70.6	9 29
7.....	28	35.6	13 33	45	75.	9 07
8.....	22	42.2	13 50	49	80.	8 68
9.....	14	46.4	15 50	26	82.8	10 13
10-14.....	62	65.	15 00	92	91.9	9 27
15-19.....	30	74.	16 50	54	97.3	9 40
20-24.....	39	85.5	16 12	17	99.2	10 12
25-29.....	16	90.5	17 30	7	99.8	7 25
30-34.....	15	94.8	15 25	2	99.9	7 00
35-44.....	16	99.7	16 80	1	100.	8 00
45 and over.....	1	100.	16 00	.....	.....	.....
Total.....	334	.....	.....	991	.....	.....

ADVANCE IN WAGES

Table XXII shows the number and per cent of all employees in four New York City factories, whose rate of pay was increased during a year. It will be seen that over a sixth received an advance — the men more often than the women in proportion to their respective numbers. The usual amount for both was 50 cents or \$1 a week. The firms considered are wholesale manufacturers in Brooklyn and Manhattan.

TABLE XXII
WAGE INCREASE IN ONE YEAR
NUMBER AND PER CENT OF BY SEX—ALL EMPLOYEES IN FOUR FACTORIES—NEW YORK CITY

	Male	Female	Both	Per cent of all
Total number employed...	626	820	1,446	100.
<i>Amount of Advance</i>				
No advance.....	509	688	1,197	82.8
\$0 25-\$0 49.....	4	11	15	1.
50- 99.....	33	75	108	7.5
1 00- 1 49.....	39	32	71	4.9
1 50- 1 99.....	11	3	14	1.
2 00- 2 99.....	13	6	19	1.3
3 00- 3 99.....	9	4	13	.9
4 00- 4 99.....	2	0	2	.....
5 00- 5 99.....	5	1	6	.4
6 00- 6 99.....	1	0	1	.....
Total number advanced...	117	132	249	17.2

WAGES AND MARRIAGE

It is to be expected that married people will require higher wages to support their families than single persons need. Our figures show that both married and single people range from one end of the wage scale to the other. Naturally, those who are married are older, and profit by maturity. Again, those who have to support others are apt to be steady workers. Accordingly, we find the representative married man somewhat higher in the wage scale than a bachelor. Taking all factory employees in the industry, the former earns between \$11 and \$12; the latter between \$8 and \$9. For women the difference is not so great. It appears that in their case the deftness of youth outweighs the experience of years, as shown below. Widows appear to be good workers — of necessity, perhaps; while widowers are apparently somewhat less steady or less vigorous than their married brethren. The wage here indicated is that received by persons midway between high and low extremes.

TABLE XXIII
FACTORY WORKERS
MEDIAN WAGE BY CONJUGAL CONDITION — NEW YORK STATE

	Male	Female
Single.....	\$8 60	\$5 80
Married.....	11 78	5 84
Widowed.....	11 50	6 00

EARNINGS AND NATIVITY

As before remarked, immigrants tend to fill in the less skilled occupations in the confectionery trade. Therefore, as a rule, they receive lower wages. Taking all factory workers together, we find that native male employees center about \$10.93 and foreign males at \$9.84. Half the native females earn over \$6.36 whereas less than half the foreign born women reach \$5.67. It must be remembered, however, that there are comparatively few native adult men and many native girls engaged in manufacturing processes. The discrepancy in earnings is therefore greater than it appears, because of different proportions by age and sex.

STATUS OF THE TRADE

In conclusion it may be stated that the confectionery trade is one that is capable of earning large profits for the entrepreneur. The rapid growth of the industry within recent years is ample proof of this. A wholesale merchant asserted that his candy taken together did not cost more than 12½ cents a pound; and although profits were stated to be less than ½ cent a pound, it was admitted that the annual output was several million pounds.

Of total costs, labor is a comparatively small proportion. The Thirteenth Census gives 13 per cent as the share for wages. The principal expense is for materials. Only in the higher grades of goods is skilled manipulation essential.

The general tendency in the industry has been for women to oust men, and for machines to displace both. As the mechanical improvements increase, boys are taking the place of girls in many lines and foreigners are pressing in. The cheapening of the process has cut wages, while the influx of immigrants has prevented organization and has kept rates down.

The following summary from the last Federal Census indicates the development of the confectionery industry in the United States during the last six decades. It furnishes a suitable conclusion for this section of the report.

GROWTH OF THE CONFECTIONERY INDUSTRY IN THE UNITED STATES

YEAR	Number of establishments	Wage earners (average number)	Wages	Cost of materials	Value of products	Value added by manufacture
1909.....	1,044	44,638	\$15,615,388	\$81,150,773	\$134,795,913	\$53,645,140
1904.....	1,348	36,239	11,699,257	48,810,342	87,087,253	38,276,911
1899*....	962	26,866	8,020,453	35,354,208	60,643,946	25,289,738
1889.....	2,021	21,724	7,783,007	31,116,629	55,997,101	24,860,472
1879.....	1,450	9,801	3,242,852	17,125,775	25,637,033	8,511,258
1869.....	949	5,825	2,091,826	8,703,560	15,922,643	7,219,083
1859.....	541	2,340	688,423	2,990,186	5,361,100	2,370,914
1849.....	383	1,733	458,904	1,691,824	3,040,671	1,348,847

Small shops no longer counted.

According to these returns, the wage earners have been multiplied 26 times; the wages paid, 34 times; the value added in manufacture, 40 times; the value of the product, 48 times; and elsewhere it is reported that the capital involved has increased 68 fold. The question now arises whether the workers are receiving their share in this growing industry.

An adequate answer to this question would require a more detailed analysis of better cost and financial accounts than we have been able to obtain. Most manufacturers do not keep records showing the efficiency of factory workers or the value of the product at various stages of completion. An employee is "worth" as much as he can get according to the general level of the labor market. How much he actually earns by adding, through his labor, value to the product, is not known.

As to net profits, we are unable to report, because manufacturers objected seriously to revealing complete financial accounts. It is generally agreed, however, that the selling price of sweets is well above their cost, the materials being the principal item of expense. The rapid turnover of capital and its remarkable increase, as shown by the Census figures quoted above, indicate that the business is not unprofitable.

VI. COVERED AND CELLULOID BUTTON FACTORIES IN NEW YORK CITY

BY ROSWELL SKEEL, JR.

Scope of Investigation.—In this investigation I have scheduled 19 celluloid button and 40 covered button establishments and have secured returns from 916 workers. So far as I can ascertain, my schedules include about all of the celluloid button manufacturers in the borough of Manhattan, some of which make covered as well as celluloid buttons. The concensus of opinion seems to be that there are about 150 establishments in Manhattan borough manufacturing covered buttons exclusively. Based upon this number I have scheduled more than one-fifth of the total, but as my schedules include all of the largest concerns I estimate that I have secured the individual returns of about one-fourth to one-third of all the covered button factory employees.

COVERED BUTTONS

Process of Manufacture.—This process may be briefly described as follows: The metal button parts of a great variety of size and pattern known as “backs” or “collets,” “rims,” and “centers,” are cut out from sheet metal on power presses fed by hand. The fabrics for covering these metal parts are cut by hand with a mallet and hollow tubular chisels of different patterns, these pieces of cut fabrics being known as “blanks.” The canvass shanks, by which the buttons are fastened to the garments, are also cut by hand with hollow chisels. The shank is inserted in the “back” or “collet” by the button maker on a foot press equipped with the requisite steel die. This operation is known as “backing” and usually includes the insertion by the foot press mechanism of a card board filler. The button makers cover the centers or the rims with the fabric blanks on the foot presses equipped with steel dies, simultaneously joining these covered parts to the backs, which is called “covering,” and which completes the making of the button. The foot press dies are patterned to correspond in size and shape to the button parts to be covered.

Development of the Industry.—For many years past covered buttons have been manufactured by this process, but until within the past few years the fabric coverings were of staple patterns and chiefly in black. Until about six years ago the industry was in the hands of a few comparatively large concerns, who made their own metal parts and dies, and who kept a fairly uniform force of employees at work. The year 1908 was a "banner year" in covered buttons, and at about that time the "cloth covered button to match exact" came into vogue, which greatly increased the use of covered buttons. These "self-material" buttons, as they are called, are made by covering the metal parts with the same materials as that from which the garments are made, the covers for such buttons being cut out by the button makers from the waste clippings which fall from the cutting machines of the garment manufacturers.

About ten years ago one of the makers of button machines put on the market a small hand press and ready-made metal button parts of various sizes, designed to enable dry goods and notion dealers, tailors, dressmakers, and small garment manufacturers to effect an economy and convenience by covering their own buttons. Out of the success of this venture and its wide advertisement grew the manufacture of metal parts and dies designed for covering cloth or self-material covered buttons on the regular standard button foot presses. It will be seen that the advent of the part and die makers created the opportunity to engage in the manufacture of covered buttons on a small scale with an inexpensive plant, consisting of a few foot presses, dies, and a stock of button parts. The desire of certain elements in our foreign population "to get into business for oneself" even on the smallest scale, is well known, and the opportunity here presented was promptly seized upon, as evidenced by the large number of small covered button makers employing from two to ten hands according to the season. I found one such paying a rental of \$18.00 per month, his entire equipment consisting of six presses, costing \$12.00 each, a cutting block and chisels, and a small stock of dies and parts. Some of the supply houses sell this equipment on the installment plan under a chattel mortgage, which further reduces the amount of ready capital required. It is needless to say that many of the proprietors of these small covered button factories

do their own cutting, or operate a foot press. They rarely make buttons of staple patterns for sale in the open market, their work being confined to orders direct from the cloak and suit and dress and waist manufacturers. The extreme competition has resulted in a demoralization of the business. About six months ago an association of covered button manufacturers was formed with a view to maintaining a reasonable scale of prices, but all to no purpose, as rebating by the "small fry" soon began. Under this system of unbridled competition among so many small manufacturers, the occupation of button making has become distinctly seasonal, following the season of the cloak and suit industry, although as evidenced by the payroll of one of the old concerns, it is quite possible for a covered button manufacturer who makes his own parts and dies to keep together a force of employees whose numbers vary but little from week to week, as his button makers can be employed in making metal parts and in "backing" and "piercing" during the slack season, and in "covering" during the busy season. This refers to the manufacture of covered buttons of staple patterns for the open market. Of course the making of self-material covered buttons on special orders necessarily follows the seasons of the cloak and suit and dress and waist industries.

CELLULOID BUTTONS

Process of Manufacture.—Celluloid buttons are made in a great variety of shapes and colors from metal and celluloid. These materials in sheets are cut out on power presses or foot presses fed by hand, or on lathes, into different flat shapes called "backs" and "blanks," and also on power presses into shaped or flat "rims." The blanks are then shaped or moulded into "parts" by the button makers on foot presses equipped with dies of the requisite pattern, the die being heated by an electric or steam attachment to provide the necessary elasticity in shaping or moulding celluloid blanks. By means of the foot press dies the button maker then joins together the back and the parts, which is called "closing," thus completing the button. A card board filler is usually inserted to provide solidity. As in the covered button industry the two part buttons are known as "plain" buttons, while buttons consisting of three or more parts are called

“combinations.” Many of these buttons are polished on power buffs. In some styles made wholly from celluloid the “parts” are pasted together by hand and shaped and smoothed by means of a special power driven lathe, which process is called “frazing.” The sheet metal from which the black japanned backs are cut is japanned and baked in a steam heated oven before being fed into the power presses. This baking process prevents the cracking of the japanned surface by the power press cutting dies. The celluloid is colored by a spraying apparatus, and stencils of many different patterns are used to obtain a great variety of color effects. Another method of coloring is to dip the finished button by hand into liquid coloring matter, and the coloring is further diversified by a process of enamelling and also by hand decorating. In some styles of all celluloid hollow buttons the parts are pasted together by hand and polished by hand with sandpaper.

Development of the Industry.—Although celluloid has long been used in very limited quantities in the manufacture of buttons it was not until about five years ago that some of the manufacturers of plated metal and covered buttons began the making of fancy celluloid buttons. These have largely superseded the older ornamental plated button in the cloak and suit trade. The industry is in the hands of comparatively few firms with sufficient capital to own the machinery necessary for making the metal parts and dies, and for the polishing, frazing, etc. These celluloid buttons are of such great variety of shape and size that it would be practically impossible for supply houses to standardize the patterns, as has been done in the covered button industry. A few of the celluloid button makers also manufacture covered buttons, but as a rule make these buttons only for the trade in general and of black fabrics, and do not attempt to compete with the numerous small manufacturers in the making of the self-material covered buttons on direct orders from the cloak and suit houses. Competition is increasing among the celluloid button makers, and new competitors of smaller capital are springing up. As the buttons are sold to the cloak and suit manufacturers, the industry appears to be necessarily seasonal. The kinds of buttons in vogue by the cloak and suit designers vary from year to year, so the button manufacturers must wait for an indicated demand.

TABULATIONS

Space hardly justifies separate tabulations of the schedules I have taken in these two kinds of button manufacture. The button makers form the majority of the employees in both industries, and their work is very similar. As before stated, a few of the celluloid button establishments also manufacture covered buttons with fabric one day and closing celluloid buttons the next. For the above reasons the tabulations are made in single tables for both industries. In covered button establishments, which do not make the metal parts and press dies, the only employees directly engaged in the manufacturing process are the cutters and button makers.

Personnel.—The only noteworthy feature of Table I, classifying the employees by sex and age, is the preponderance of workers under 25 years of age, of whom there are 675 out of a total of 916, that is to say, 73.6 per cent.

TABLE I
SEX AND AGE

YEARS	Male	Female
14-15.....	42	9
16-17.....	122	60
18-20.....	165	93
21-24.....	126	58
25-29.....	77	21
30-34.....	34	12
35-39.....	21	14
40-44.....	13	9
45-54.....	26	8
55-64.....	3	2
65+.....	1	.....
	630	286

Table II, giving the conjugal condition, shows that there are 756 single persons out of a total of 916, so that 82.5 per cent of all are unmarried. The large proportion of youthful single males indicate that expected earnings are low.

TABLE II
CONJUGAL CONDITION

	Male	Female
Single.....	501	255
Married.....	124	9
Widowed or divorced.....	5	22
	630	286

Table III classifies the employees by nativity. About three-fourths were born in foreign countries, that is, 671 out of 916, hence we see that 73.2 per cent of all are foreign born. Thirteen different countries are represented. It will be noted that more than two-fifths of the total foreign born are Russians. Many of the foreign employees are recent arrivals in this country and speak little or no English. Factory proprietors have frequently said to me "I don't see how you can take those cards as so many of the employees don't speak English." The majority of the single males are not members of a family group and live as boarders, as do the married males whose wives are in Europe.

TABLE III
NATIVITY

	Male	Female
Native.....	107	138
Russian.....	312	76
Austrian.....	94	28
Italian.....	73	20
German.....	8	5
Roumanian.....	12	2
Irish.....	1	4
English.....	4	8
Hungarian.....	10	3
Turkish.....	6	1
South American.....	2	0
Dutch.....	1	0
Greek.....	0	1
	630	286

Occupations.—The employees are usually obtained by advertisements in the newspapers, learners as well as experienced hands. An occasional tool maker's apprentice is found. The only skilled employees are the tool makers, using the term skilled in the sense of having to serve an apprenticeship of several years to learn how to perform the required task. Excepting certain operations in spraying, japanning and hand decorating, all of the occupations are easily learned, and in all such, skill means speed and accuracy. Excepting the aforesaid employments the occupations are all monotonously mechanical. None of the occupations can be said to be "speeded up" to such paces as obtain in the needle trades; nor is any of the work "heavy." Almost all of the celluloid button establishments keep their tool makers

the year round, and the die setters and sprayers and jappers have pretty steady employment, and a considerable number of the power press hands work the year round. The button makers, polishers and other miscellaneous employments are decidedly seasonal. A large majority of the factory employees sit at their work. There are no unwholesome conditions to contend against in the covered button industry, and only the occupation of spraying in celluloid button making may be detrimental to health unless properly safeguarded. The banana oil used in the coloring liquids give off highly pungent fumes which are very irritating to the lungs and throat. In spite of the suction fans placed directly over the spraying table the atmosphere of some spraying rooms is so irritating to the bronchial tubes that it is difficult to believe that the health of the employees who work in these rooms can be unaffected, yet none of these sprayers of whom I asked the question complained of any ill effects.

It will be noted in Table IV that the button makers comprise 48.6 per cent of all the employees. To give an idea of the monotony of the button maker's task it may be noted that to "cover" 30 gross of buttons per day (an ordinary average) he would have to press forward the power press foot pedal 8,640 times, and would have to make about 25,920 hand movements.

TABLE IV
OCCUPATIONS

	Male	Female
Button makers.....	281 (24 of whom are piece workers)	165 (19 of whom are piece workers)
Sprayers.....	13	1
Carders.....	0	22
Polishers.....	39	0
Sandpaperers.....	5	0
Dippers.....	3	6
Frasers.....	4	0
Decorators.....	4	8
Diesetters.....	11	1
Toolmakers.....	39	0
Pasters.....	1	12
Foremen and forewomen.....	26	7
Jappers.....	4	0
Power-press hands.....	29	10
Miscellaneous.....	3	1
Floor boys.....	5	0
Office.....	36	53
Cutters.....	46	0
Errand boys.....	81	0
	630	286

TABLE V
SPECIFIED RATES BY OCCUPATION

WEEKLY RATES	BUTTON- MAKERS		SPRAYERS, JAPANNERS, DECORATORS		CARDERS		POLISHERS, FRAMERS		SANDPAPERS, PASTERS, DIPPERS		DISSETTERS		TOOL- MAKERS		FOREMEN, FOREWOMEN		WEEKLY RATES
	Male	Female	Male	Female	Female	Male	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Less than \$3 00
\$3 00-\$3 49.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$3 00- 3 49
3 50- 3 99.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3 50- 3 99
4 00- 4 49.....	8	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	4 00- 4 49
4 50- 4 99.....	3	2	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	4 50- 4 99
5 00- 5 49.....	22	8	.....	1	5	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5 00- 5 49
5 50- 5 99.....	4	7	.....	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5 50- 5 99
6 00- 6 49.....	29	11	.....	1	3	7	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	6 00- 6 49
6 50- 6 99.....	3	4	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6 50- 6 99
7 00- 7 49.....	18	31	.....	.....	4	5	.....	.....	1	.....	.....	.....	.....	.....	1	.....	7 00- 7 49
7 50- 7 99.....	13	22	.....	1	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	7 50- 7 99
8 00- 8 99.....	32	34	.....	.....	.....	3	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	8 00- 8 99
9 00- 9 99.....	29	16	.....	1	.....	9	.....	.....	2	.....	.....	.....	.....	.....	1	.....	9 00- 9 99
10 00-10 99.....	34	7	.....	1	.....	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	10 00-10 99
11 00-11 99.....	19	.....	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11 00-11 99
12 00-12 99.....	20	2	.....	2	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12 00-12 99
13 00-13 99.....	8	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	13 00-13 99
14 00-14 99.....	6	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14 00-14 99
15 00-15 99.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	15 00-15 99
16 00-17 99.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	16 00-17 99
18 00-19 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	18 00-19 99
20 00-24 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	20 00-24 99
25 00-29 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	.....	30 00-34 99
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	35 00-39 99
40 00 and over..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Not reported....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not reported
Total.....	257	146	21	9	20	43	9	18	11	1	39	26	7	Total			

TABLE V
SPECIFIED RATES BY OCCUPATION (concluded)

WEEKLY RATES	POWER-PRESS HANDS		CUTTERS		FLOOR AND BRAND BOYS		OFFICE		MISCELLANEOUS		TOTAL		CUMULATIVE PER CENT		WEEKLY RATES
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00	3	.....	.5	.....	...Less than \$3 00
\$3 00-\$3 49	1	.....	.....	.....	.....	.....	1	.....	.7	.4	.....3 00- 3 49
3 50- 3 99	2	.....	.....	.....	.....	.....	2	.....	1.0	.8	.....3 50- 3 99
4 00- 4 49	16	.....	.....	.....	.....	.....	27	4	5.5	2.3	.....4 00- 4 49
4 50- 4 99	12	.....	.....	.....	.....	.....	17	4	8.3	3.8	.....4 50- 4 99
5 00- 5 49	31	.....	.....	.....	.....	.....	61	19	18.4	11.0	.....5 00- 5 49
5 50- 5 99	7	.....	.....	.....	.....	.....	16	15	21.0	16.6	.....5 50- 5 99
6 00- 6 49	13	.....	.....	.....	.....	.....	62	28	31.3	27.2	.....6 00- 6 49
6 50- 6 99	6	7	32.3	29.8	.....6 50- 6 99
7 00- 7 49	36	49	38.2	48.3	.....7 00- 7 49
7 50- 7 99	20	29	41.5	59.2	.....7 50- 7 99
8 00- 8 99	49	48	49.6	77.3	.....8 00- 8 99
9 00- 9 99	60	25	59.5	86.7	.....9 00- 9 99
10 00-10 99	48	14	67.3	92.0	.....10 00-10 99
11 00-11 99	33	3	72.7	98.1	.....11 00-11 99
12 00-12 99	39	10	79.1	96.9	.....12 00-12 99
13 00-13 99	24	.....	83.1	.....	.....13 00-13 99
14 00-14 99	14	2	85.4	97.7	.....14 00-14 99
15 00-15 99	25	4	89.5	99.2	.....15 00-15 99
16 00-17 99	11	2	91.3	100.0	.....16 00-17 99
18 00-19 99	20	.....	94.6	.....	.....18 00-19 99
20 00-24 99	17	.....	97.4	.....	.....20 00-24 99
25 00-29 99	10	.....	99.1	.....	.....25 00-29 99
30 00-34 99	2	.....	99.4	.....	.....30 00-34 99
35 00-39 99	8	.....	100.0	.....	.....35 00-39 99
40 00 and over40 00 and over
Not reportedNot reported...
Total.....	29	.....	46	.....	86	.....	36	53	3	1	606	265	.....	.....	.....Tot.l

Rates of Wages.—Time rates prevail in all the occupations excepting that out of a total of 446 button makers 43 were piece workers. There is no uniform wage standard in the trade. The wages appear to be determined entirely by the supply of workers, coupled with their necessity to work, and the opinion of the foremen as to individual efficiency. The employees are usually hired without a specific wage agreement, and after having been at work for one or more days the foreman fixes the wage, which the employee accepts if satisfied. There is no assurance of increase of wage with added years of experience.

Table V shows a wide divergency in the wage rates. It will be perceived that out of 99 button makers paid at a rate of less than \$6.50 per week, 69 are males and 30 are females, showing that the male learners predominate. There is about an equal number of male and female button makers receiving a wage rate between \$8 and \$8.99, but at the rate of \$9 and above there are 122 male and only 25 female button makers, showing that a decided majority of those receiving the highest wages are men. Nearly half of all the male employees receive less than \$9 a week, and nearly half the females receive less than \$7.50.

Table VI shows the actual earnings of the employees for the week preceding my schedules in each factory. Some of the smaller factories do not keep a pay roll. In some cases the proprietors were absent and I could not secure access to the pay roll and in such instances I had to rely upon the statements of the employees as to their weekly rates and actual earnings. Over half the males actually received less than \$9 a week, and over half the female employees received less than \$7.

Tables V and VI show a considerable difference between the specified rates and the amounts actually earned. It will be noted that the actual earnings fall below the rates quoted for employees as a whole. For example, whereas half the women were supposed to receive \$7.50 or less, more than half actually received less than \$7 for the week in which the investigation was made. Time did not permit of my scheduling from all the pay rolls I inspected the total number of employees at work each week for the preceding 52 weeks, and the gross amount of weekly wages

paid. I did secure this form from several of the large establishments and they reveal a wide difference between the number of employees at work in the busy and slack seasons, to-wit:

	Maximum number of employees	Minimum number of employees
Schedule No. 1.....	32	15
" " 2.....	164	87
" " 3.....	94	52
" " 4.....	70	24
Total.....	360	178

As previously referred to, one firm making covered buttons exclusively and manufacturing their own parts and dies shows a much smaller difference, the maximum number of employees being 46, and the minimum 33.

In response to my repeated inquiries of both employers and employees as to how many months in a year the average button maker works, the response has been "from six to eight months." Some of the best workers have almost continuous employment, but the great majority are dropped in the slack seasons. To many such I put the question "What, if any, kind of work do you find in your slack seasons?" In reply the following occupations were given: shirt waist operator, Western Union messenger, factory helper, errand boy, paper perforating machine operator, fan maker, retail store handy man, shoe salesman, stock clerk, elevator operator, shipping clerk, packer in department store, clerk in retail store, porter, cutter in flag factory, furrier, violinist, fruit stand peddler, waiter, painter's helper, push-cart peddler, leather belt maker, street photographer, door to door peddler.

Table VII shows the distribution of rates according to age. It will be noted that according to this table the great majority of men never reach \$15 a week, and the \$14 level is attained only by half of those 40 years of age or older. In the case of the women the majority never earn as much as \$9, and \$8 is attained by the run of female employees only after 21 years of age. The number of male employees over 21 years of age who receive rates under \$10 is 107, and there are 104 female employees 18 years of age and over who receive rates under \$8.

TABLE VI
ACTUAL EARNINGS BY OCCUPATION

WEEKLY EARNINGS	BUTTON-MAKERS		SPRAYERS, JAPANERS, DECORATORS		CARDERS	POLISHERS, FRAMERS		SANDPAPERS, PASTERS, DIPPERS		DRESSMAKERS		TOOL-MAKERS		FOREMEN, FOREWOMEN		WEEKLY EARNINGS
	Male	Female	Male	Female		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.	7	6	1	.....	.....	5	.....	.....	2	.....	.....	.....	.....	.....	.....	Less than \$3 00
\$3 00-\$3 49.....	5	4	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$3 00-\$3 49
3 50-3 99.....	5	4	.....	.....	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	3 50-3 99
4 00-4 49.....	11	10	.....	2	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	4 00-4 49
4 50-4 99.....	6	11	.....	1	1	2	.....	1	.....	.....	.....	.....	.....	.....	.....	4 50-4 99
5 00-5 49.....	22	10	1	.....	5	1	.....	.....	2	.....	.....	.....	.....	.....	.....	5 00-5 49
5 50-5 99.....	10	21	1	3	5	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	5 50-5 99
6 00-6 49.....	28	14	1	.....	1	3	.....	1	3	.....	.....	.....	.....	.....	.....	6 00-6 49
6 50-6 99.....	8	10	1	.....	2	3	.....	.....	.....	1	.....	.....	.....	.....	.....	6 50-6 99
7 00-7 49.....	15	15	1	.....	3	5	.....	.....	3	.....	.....	.....	.....	.....	.....	7 00-7 49
7 50-7 99.....	14	13	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	7 50-7 99
8 00-8 99.....	38	27	1	.....	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	8 00-8 99
9 00-9 99.....	23	13	2	1	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	9 00-9 99
10 00-10 99.....	33	4	5	1	.....	4	.....	1	.....	.....	.....	.....	.....	.....	.....	10 00-10 99
11 00-11 99.....	14	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	11 00-11 99
12 00-12 99.....	19	3	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	12 00-12 99
13 00-13 99.....	9	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13 00-13 99
14 00-14 99.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	14 00-14 99
15 00-15 99.....	8	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15 00-15 99
16 00-17 99.....	3	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00-17 99
18 00-19 99.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18 00-19 99
20 00-24 99.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20 00-24 99
25 00-29 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 00-34 99
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35 00-39 99
40 00 and over..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Not reported....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not reported
Total.....	281	165	21	9	23	43	9	18	11	1	39	26	7	.....	Total	

TABLE VI
ACTUAL EARNINGS BY OCCUPATION (concluded)

WEEKLY EARNINGS	POWER-PRESS HANDS		CUTTERS		FLOOR AND ERRAND BOYS		OFFICE		MISCELLANEOUS		TOTAL		CUMULATIVE PER CENT		WEEKLY EARNINGS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.....	1	.....	.....	.....	1	2	.....	.....	.....	.....	15	10	2.4	3.5	.. Less than \$3 00
\$3 00-\$3 49.....	1	.....	.....	.....	2	.....	1	.....	.....	.....	9	5	3.8	5.2	.....\$3 00- 3 49
3 50- 3 99.....	1	.....	.....	.....	2	.....	1	.....	.....	.....	9	7	5.2	7.7	..... 3 50- 3 99
4 00- 4 49.....	.....	1	.....	.....	15	1	1	.....	.....	.....	29	16	9.8	13.3	..... 4 00- 4 49
4 50- 4 99.....	.....	.....	.....	.....	13	.....	1	.....	.....	.....	25	14	13.8	18.2	..... 4 50- 4 99
5 00- 5 49.....	1	.....	.....	.....	31	1	4	.....	.....	1	60	19	23.3	24.8	..... 5 00- 5 49
5 50- 5 99.....	.....	2	.....	.....	6	3	2	.....	.....	.....	21	36	26.7	37.5	..... 5 50- 5 99
6 00- 6 49.....	2	1	.....	.....	12	9	4	.....	.....	.....	54	28	35.3	47.3	..... 6 00- 6 49
6 50- 6 99.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	15	15	37.6	52.5	..... 6 50- 6 99
7 00- 7 49.....	2	2	.....	.....	1	7	2	.....	.....	.....	30	30	42.4	63.0	..... 7 00- 7 49
7 50- 7 99.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	17	15	45.1	68.2	..... 7 50- 7 99
8 00- 8 99.....	2	2	.....	.....	.....	8	1	.....	.....	.....	56	38	54.0	81.5	..... 8 00- 8 99
9 00- 9 99.....	8	2	.....	.....	3	4	3	.....	.....	.....	47	20	61.5	88.5	..... 9 00- 9 99
10 00-10 99.....	2	.....	.....	.....	.....	.....	3	.....	.....	.....	54	11	70.0	92.3	..... 10 00-10 99
11 00-11 99.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	28	4	74.4	93.7	..... 11 00-11 99
12 00-12 99.....	2	.....	.....	.....	.....	5	2	.....	.....	.....	36	10	80.1	97.2	..... 12 00-12 99
13 00-13 99.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	24	.....	84.0	.....	..... 13 00-13 99
14 00-14 99.....	2	.....	.....	.....	.....	1	2	.....	.....	.....	10	2	85.6	97.9	..... 14 00-14 99
15 00-15 99.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	25	4	89.6	99.3	..... 15 00-15 99
16 00-17 99.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	12	2	91.5	100.0	..... 16 00-17 99
18 00-19 99.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	19	.....	94.5	.....	..... 18 00-19 99
20 00-24 99.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	18	.....	97.4	.....	..... 20 00-24 99
25 00-29 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	.....	99.1	.....	..... 25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	99.6	.....	..... 30 00-34 99
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	100.0	.....	..... 35 00-39 99
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..... 40 00 and over
Not reported.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..... Not reported
Total.....	29	10	46	.....	86	53	36	.....	8	1	630	286	.....	.....	..... Total

TABLE VII
SPECIFIED RATES BY AGE

WEEKLY RATES	14-15 YEARS		16-17 YEARS		18-20 YEARS		21-24 YEARS		25-29 YEARS		30-34 YEARS		WEEKLY RATES
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	Less than \$3 00
\$3 00-\$3 49.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	\$3 00- 3 49
3 50- 3 99.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	3 50- 3 99
4 00- 4 49.....	12	3	11	1	4	.....	.....	.....	.....	.....	.....	.....	4 00- 4 49
4 50- 4 99.....	10	2	5	1	2	1	.....	.....	.....	.....	.....	.....	4 50- 4 99
5 00- 5 49.....	11	2	27	12	18	2	2	1	.....	.....	1	.....	5 00- 5 49
5 50- 5 99.....	3	.....	8	7	5	5	.....	3	.....	.....	.....	.....	5 50- 5 99
6 00- 6 49.....	3	.....	26	9	17	12	7	4	.....	.....	1	.....	6 00- 6 49
6 50- 6 99.....	.....	.....	1	3	.....	4	3	.....	.....	.....	1	.....	6 50- 6 99
7 00- 7 49.....	.....	.....	8	11	12	21	8	11	.....	.....	.....	.....	7 00- 7 49
7 50- 7 99.....	.....	.....	3	1	6	9	3	6	.....	.....	.....	.....	7 50- 7 99
8 00- 8 99.....	.....	.....	13	5	14	9	9	15	.....	.....	7	.....	8 00- 8 99
9 00- 9 99.....	1	.....	6	2	23	8	16	4	.....	.....	3	.....	9 00- 9 99
10 00-10 99.....	.....	.....	4	1	20	7	9	4	.....	.....	3	.....	10 00-10 99
11 00-11 99.....	.....	.....	2	.....	14	2	11	1	.....	.....	2	.....	11 00-11 99
12 00-12 99.....	.....	.....	1	.....	8	3	18	3	.....	.....	2	.....	12 00-12 99
13 00-13 99.....	.....	.....	.....	.....	9	.....	6	.....	.....	.....	2	.....	13 00-13 99
14 00-14 99.....	.....	.....	.....	.....	3	1	6	1	.....	.....	.....	.....	14 00-14 99
15 00-15 99.....	.....	.....	.....	.....	2	1	12	2	.....	.....	.....	.....	15 00-15 99
16 00-17 99.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	.....	16 00-17 99
18 00-19 99.....	.....	.....	.....	.....	1	.....	6	.....	.....	.....	3	.....	18 00-19 99
20 00-24 99.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	1	.....	20 00-24 99
25 00-29 99.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	4	.....	25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 00-34 99
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	35 00-39 99
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Not reported.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not reported
Total.....	41	8	116	53	161	86	124	56	74	21	82	10	Total
Median.....	\$4 87	\$4 50	\$6 11	\$6 30	\$9 02	\$7 43	\$11 27	\$8 20	\$12 00	\$8 50	\$10 67	\$8 50	Median

TABLE VII
SPECIFIED RATES BY AGE (concluded)

WEEKLY RATES	35-39 YEARS		40-44 YEARS		45-54 YEARS		55-64 YEARS		65 +		TOTALS		WEEKLY RATES
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	Less than \$3 00
\$3 00-\$3 49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	...\$3 00- 3 49
3 50- 3 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	...3 50- 3 99
4 00- 4 49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27	4	...4 00- 4 49
4 50- 4 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	4	...4 50- 4 99
5 00- 5 49	1	1	.....	.....	.....	.....	.....	1	.....	.....	61	19	...5 00- 5 49
5 50- 5 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16	15	...5 50- 5 99
6 00- 6 49	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	62	28	...6 00- 6 49
6 50- 6 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6	7	...6 50- 6 99
7 00- 7 49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	49	...7 00- 7 49
7 50- 7 99	2	2	.....	.....	.....	.....	.....	.....	.....	.....	20	29	...7 50- 7 99
8 00- 8 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49	48	...8 00- 8 99
9 00- 9 99	2	1	.....	.....	.....	.....	.....	.....	.....	.....	60	25	...9 00- 9 99
10 00-10 99	2	1	.....	.....	.....	.....	.....	.....	.....	.....	48	14	...10 00-10 99
11 00-11 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33	3	...11 00-11 99
12 00-12 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	39	10	...12 00-12 99
13 00-13 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	...13 00-13 99
14 00-14 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	14	2	...14 00-14 99
15 00-15 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	25	4	...15 00-15 99
16 00-17 99	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	11	2	...16 00-17 99
18 00-19 99	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	...18 00-19 99
20 00-24 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....	...20 00-24 99
25 00-29 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	.....	...25 00-29 99
30 00-34 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	...30 00-34 99
35 00-39 99	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	...35 00-39 99
40 00 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Not reported	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....Not reported
Total.....	18	13	8	24	8	2	2	1	606	265	Total	.....	.....Total
Median.....	\$13 50	\$8 36	\$8 00	\$14 50	\$8 40	\$23 00	\$8 75	\$27 50	.....	.....	Median	.....	.....Median

APPENDIX IV—WAGE INVESTIGATION

TABLE VIII
ACTUAL EARNINGS BY AGE

WEEKLY EARNINGS	14-15 YEARS		16-17 YEARS		18-20 YEARS		21-24 YEARS		25-29 YEARS		30-34 YEARS		WEEKLY EARNINGS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00.....	1	2	2	2	7	3	4	3	1	.....	.....	.....	..Less than \$3 00
\$3 00-\$3 49.....	3	.....	1	2	2	3	2	.....	3	.....	.....	.....	.....\$3 00- 3 49
3 50- 3 99.....	3	2	3	4	2	.....	.....	.....	.....	.....	.....	1	.....3 50- 3 99
4 00- 4 49.....	8	3	14	5	5	3	2	2	.....	2	.....	.....	.....4 00- 4 49
4 50- 4 99.....	9	1	7	5	5	4	.....	3	2	.....	.....	.....	.....4 50- 4 99
5 00- 5 49.....	11	1	25	8	18	5	.....	3	3	.....	2	.....	.....5 00- 5 49
5 50- 5 99.....	3	.....	9	7	5	11	3	10	1	3	.....	1	.....5 50- 5 99
6 00- 6 49.....	4	.....	26	9	13	10	6	4	1	2	.....	1	.....6 00- 6 49
6 50- 6 99.....	.....	.....	1	2	5	8	4	3	1	.....	4	.....	.....6 50- 6 99
7 00- 7 49.....	.....	.....	7	9	10	15	6	4	3	1	.....	.....	.....7 00- 7 49
7 50- 7 99.....	.....	.....	2	1	4	2	4	5	3	3	1	2	.....7 50- 7 99
8 00- 8 99.....	.....	.....	12	4	14	10	13	6	9	2	6	3	.....8 00- 8 99
9 00- 9 99.....	.....	.....	5	1	20	7	12	3	4	4	4	4	.....9 00- 9 99
10 00-10 99.....	.....	.....	3	1	21	4	11	4	8	1	3	.....	.....10 00-10 99
11 00-11 99.....	.....	.....	3	.....	13	3	5	1	4	.....	2	.....	.....11 00-11 99
12 00-12 99.....	.....	.....	2	.....	8	3	17	3	7	1	.....	.....	.....12 00-12 99
13 00-13 99.....	.....	.....	.....	.....	7	.....	8	.....	5	.....	2	.....	.....13 00-13 99
14 00-14 99.....	.....	.....	.....	.....	2	1	4	1	1	.....	1	.....	.....14 00-14 99
15 00-15 99.....	.....	.....	.....	.....	3	1	9	2	8	1	.....	.....	.....15 00-15 99
16 00-17 99.....	.....	.....	.....	.....	.....	.....	4	1	2	1	1	.....	.....16 00-17 99
18 00-19 99.....	.....	.....	.....	.....	.....	.....	6	.....	5	.....	2	.....	.....18 00-19 99
20 00-24 99.....	.....	.....	.....	.....	.....	.....	5	.....	6	.....	1	.....	.....20 00-24 99
25 00-29 99.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....	4	.....	.....25 00-29 99
30 00-34 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....30 00-34 99
35 00-39 99.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....35 00-39 99
40 00 and over.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...40 00 and over
Not reported.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....Not reported
Total.....	43	9	122	60	165	93	126	58	77	21	34	12	.....Total
Median.....	\$4 83	\$4 08	\$6 00	\$5 89	\$7 10	\$6 97	\$10 64	\$7 25	\$11 37	\$8 25	\$10 00	\$8 67	.....Median

TABLE VIII (concluded)
ACTUAL EARNINGS BY AGE

WEEKLY EARNINGS	35-39 YEARS		40-44 YEARS		45-54 YEARS		55-64 YEARS		65 +		TOTALS		WEEKLY EARNINGS
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	10	Less than \$3 00
\$3 00-\$3 49...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	5	...\$3 00- 3 49
3 50- 3 99...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	7	...3 50- 3 99
4 00- 4 49...	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	29	16	...4 00- 4 49
4 50- 4 99...	.....	.....	2	1	.....	.....	.....	.....	.....	.....	25	14	...4 50- 4 99
5 00- 5 49...	1	1	.....	.....	.....	.....	.....	1	.....	.....	66	19	...5 00- 5 49
5 50- 5 99...	.....	.....	.....	2	.....	2	.....	.....	.....	.....	21	36	...5 50- 5 99
6 00- 6 49...	1	1	1	1	.....	.....	.....	.....	.....	.....	54	28	...6 00- 6 49
6 50- 6 99...	1	2	.....	.....	.....	.....	.....	.....	.....	.....	15	15	...6 50- 6 99
7 00- 7 49...	1	1	.....	.....	.....	.....	.....	.....	.....	.....	30	30	...7 00- 7 49
7 50- 7 99...	2	2	1	.....	.....	.....	.....	.....	.....	.....	17	15	...7 50- 7 99
8 00- 8 99...	1	5	1	4	.....	4	.....	.....	.....	.....	58	38	...8 00- 8 99
9 00- 9 99...	1	.....	.....	1	.....	.....	.....	.....	.....	.....	47	20	...9 00- 9 99
10 00-10 99...	2	1	2	.....	.....	.....	.....	.....	.....	.....	54	11	...10 00-10 99
11 00-11 99...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	28	40	...11 00-11 99
12 00-12 99...	.....	1	.....	.....	.....	1	.....	.....	.....	.....	36	10	...12 00-12 99
13 00-13 99...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	24	.....	...13 00-13 99
14 00-14 99...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10	2	...14 00-14 99
15 00-15 99...	1	.....	1	.....	.....	.....	.....	.....	.....	.....	25	4	...15 00-15 99
16 00-17 99...	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	12	2	...16 00-17 99
18 00-19 99...	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	19	.....	...18 00-19 99
20 00-24 99...	1	.....	2	.....	.....	.....	.....	.....	.....	.....	18	.....	...20 00-24 99
25 00-29 99...	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	11	.....	...25 00-29 99
30 00-34 99...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	...30 00-34 99
35 00-39 99...	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	...35 00-39 99
40 00 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...40 00 and over
Not reported...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...Not reported
Total.....	21	14	13	9	26	8	3	2	1	.....	630	286	.....Total
Median.....	\$11 50	\$8 00	\$10 75	\$8 12	\$16 00	\$8 25	\$15 50	\$8 75	\$27 50	.....	.....	.....	.....Median

Table VIII shows that the actual earnings at each age are generally lower than the rates quoted, especially noteworthy in the case of male employees. For example, in no age group does a majority of men earn as much as \$12 until they reach the age of 45 years or over. The rates and earnings of women do not show the same variation. This is partly explained by the fact that most of the female employees are engaged on time rates. It is plain, however, that the actual earnings of girls and women from 16 to 25 years fall below the rates that are usually quoted.

Table IX shows the increase of earning capacity with years of experience in the trade.* It will be noted that, grouped by years of experience, the majority of men in no group earn a wage of \$16 or over until after 9 years or more in the business. The majority of women rise to the \$8 level only after 5 years experience, and those who earn more than this amount are the exception.

Classifying wages by conjugal condition, I find that the wage of the majority of single males is less than \$9 a week, whereas the married men center at about \$13. The few cases of widowers and divorced males show that their earnings are somewhat higher. This variation is, of course, due in the main to difference in age. The women show a similar tendency. The majority of single girls get less than \$7.50. For married women and widows the rates of the majority are \$8 or more. The earnings of all these classes are less than the rates quoted.

With regard to nativity I find that both rates and earnings of native males are less than those of men born abroad. The reason for this is perfectly clear. Many of the native male employees are boys and young men. It will be noted in Table I that there are 164 males between 14 and 17 years of age. About 90 of these are office and errand boys, who receive small wages. On comparing the rates and earnings of female employees I find on the other hand that the majority of native girls surpass those born abroad in earning capacity.

* This table classified all employees by length of experience in the button industry. The higher paid employees (\$15 and over per week) are nearly all experienced tool makers though they may have come only recently into this industry.

Conclusion.— Out of the total of 281 male button makers 245 are unmarried, and of these 140 live as boarders with either relatives or strangers, and 10 or more are married, but live as boarders, their wives being in Europe. The great majority of these boarders live at a low standard of comfort. From my conversations with many of the workers who live at home and who form one of a family group of wage earners, I can safely state that many such must content themselves with the bare necessities of life. A large number of employers and employees unite in saying that “a married man cannot make a living as a button maker.” The great preponderance of single males supports this statement, and it is evident that many of the employees are at work in these button industries for net annual wages insufficient to maintain them. Several attempts have been made to unionize the button makers, but all have failed. To form a lasting organization among unskilled workers, chiefly foreign born and at work for so many employers, can hardly succeed in a labor market already overcrowded, and into which there is a steady flow of the job seeking immigrant. Can any workable scheme be devised that will remedy this condition of insufficient wage? Apart from the various problems involved it appears to me that the volume and character of our present immigration presents an almost insurmountable barrier to a solution of this question, that is, in Greater New York, which is the only manufacturing center in which I am at all familiar with conditions. Minimum wage decrees are now legally in force in several of our States. The outcome of this legislation will serve to determine whether this remedy can be successfully applied under the existing conditions of the labor market in this State.

TABLE IX
SPECIFIED RATES BY YEARS OF EXPERIENCE

WEEKLY RATES	LESS THAN 1		1 YEAR		2 YEARS		3 YEARS		4 YEARS		5 YEARS		6 YEARS		7 YEARS		WEEKLY RATES
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Less than \$3 00
\$3 00-\$3 49	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	\$3 00- 3 49
3 50- 3 99	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3 50- 3 99
4 00- 4 49	26	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4 00- 4 49
4 50- 4 99	16	1	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4 50- 4 99
5 00- 5 49	54	11	4	5	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5 00- 5 49
5 50- 5 99	11	5	4	5	1	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	5 50- 5 99
6 00- 6 49	38	9	14	8	7	7	1	.....	2	.....	1	.....	.....	.....	.....	.....	6 00- 6 49
6 50- 6 99	3	1	2	1	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6 50- 6 99
7 00- 7 49	14	6	9	11	7	10	4	.....	2	.....	.....	.....	.....	.....	.....	.....	7 00- 7 49
7 50- 7 99	7	.....	5	3	2	5	2	.....	1	.....	.....	.....	.....	.....	.....	.....	7 50- 7 99
8 00- 8 99	7	4	21	1	15	7	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	8 00- 8 99
9 00- 9 99	6	1	18	3	12	3	11	.....	5	.....	.....	.....	.....	.....	.....	.....	9 00- 9 99
10 00-10 99	4	.....	11	2	11	2	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	10 00-10 99
11 00-11 99	1	.....	6	.....	9	2	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	11 00-11 99
12 00-12 99	4	.....	9	.....	7	2	6	.....	2	.....	.....	.....	.....	.....	.....	.....	12 00-12 99
13 00-13 99	1	.....	2	.....	1	.....	5	.....	3	.....	.....	.....	.....	.....	.....	.....	13 00-13 99
14 00-14 99	.....	.....	2	.....	1	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	14 00-14 99
15 00-15 99	1	.....	3	.....	.....	.....	5	.....	3	.....	.....	.....	.....	.....	.....	.....	15 00-15 99
16 00-17 99	2	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	16 00-17 99
18 00-19 99	1	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18 00-19 99
20 00-24 99	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20 00-24 99
25 00-29 99	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	25 00-29 99
30 00-34 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30 00-34 99
35 00-39 99	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35 00-39 99
40 00 and over	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40 00 and over
Not reported	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Not reported
Total	204	44	114	41	76	49	64	34	26	11	34	17	19	6	11	9	Total
Median	\$5 50	\$5 90	\$8 81	\$6 75	\$9 42	\$7 32	\$10 75	\$7 87	\$13 00	\$7 75	\$13 20	\$8 12	\$12 50	\$8 00	\$15 62	\$8 62	Median

TABLE IX (concluded)
SPECIFIED RATES BY YEARS OF EXPERIENCE

WEEKLY RATES	8 YEARS		9 YEARS		10-14 YEARS		15-19 YEARS		20-24 YEARS		25-29 YEARS		30-34 YEARS		35-44 YEARS		WEEKLY RATES
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Less than \$3 00	Less than \$3 00
\$3 00-\$3 49	\$3 00- 3 49
3 50- 3 99	3 50- 3 99
4 00- 4 49	4 00- 4 49
4 50- 4 99	4 50- 4 99
5 00- 5 49	5 00- 5 49
5 50- 5 99	5 50- 5 99
6 00- 6 49	6 00- 6 49
6 50- 6 99	6 50- 6 99
7 00- 7 49	7 00- 7 49
7 50- 7 99	7 50- 7 99
8 00- 8 99	8 00- 8 99
9 00- 9 99	9 00- 9 99
10 00-10 99	10 00-10 99
11 00-11 99	11 00-11 99
12 00-12 99	12 00-12 99
13 00-13 99	13 00-13 99
14 00-14 99	14 00-14 99
15 00-15 99	15 00-15 99
16 00-17 99	16 00-17 99
18 00-19 99	18 00-19 99
20 00-24 99	20 00-24 99
25 00-29 99	25 00-29 99
30 00-34 99	30 00-34 99
35 00-39 99	35 00-39 99
40 00 and over	40 00 and over
Not reported...	Not reported
Total.....	16	5	3	4	20	19	6	11	2	6	3	4	3	4	5	1	Total..
Median.....	\$14 50	\$9 50	\$22 56	\$8 50	\$16 00	\$9 12	\$18 00	\$3 62	\$22 50	\$8 40	\$19 00	\$8 67	\$22 50	\$9 00	\$27 50	\$12 50	Median

VII. WAGES IN THE MILLINERY TRADE

By MARY VAN KLEECK

Millinery is a trade which illustrates well some crucial problems in the effort to establish wage standards by legislation. It is also an industry so important numerically in New York City, and so identified by tradition with women's normal pursuits, as to demand consideration by a wage commission.* Approximately 13,000 women are employed in the various processes of trimming hats in retail and wholesale shops, while many others save milliners' bills by making their own headwear, or buying hats which have been partially trimmed and then adding the finishing touches. In other words, the industrial revolution has done its work very imperfectly in this industry, and within the compass of a few blocks we may find the old domestic system of production and the large wholesale factory, the parlor milliner who makes hats for a few neighbors, and the high grade retail shop which produces veritable works of art to be worn not only by New Yorkers but by customers in far-distant states and even, as one retailer boasts, in Europe and in France itself.

It is all called "millinery," but the methods of production and distribution of goods, and consequently the types of workmanship and conditions of labor, differ so markedly from shop to shop as to defy attempts at standardization. What, then, must be the guiding principle in determining fair and adequate rates of pay? With so elastic a labor supply as results from the existence of a large group of amateur home milliners who may at any time aspire to work in a shop, how may a fair wage scale be protected from the downward pull of unregulated competition for jobs? This competition is increased by the fact that

**Plan of co-operation in investigation:* Before the Factory Investigating Commission began its investigation of wages the Committee on Women's Work of the Russell Sage Foundation had completed a preliminary study of the millinery trade in New York, based on interviews with employers in the shops, and with millinery workers in their homes. No payrolls had been examined in this preliminary study. The plan of co-operation with the Factory Investigating Commission provided for the utilization of the staff of the Committee on Women's Work by the Commission in securing payroll statistics in millinery shops, while the Russell Sage Foundation would be permitted to use the material after it had been submitted to the Commission. The Commission authorized the members of the staff of the Committee on Women's Work to act as state agents, using the same schedules that had been adopted in the other wage investigations organized by the Commission.

the social standing of millinery is high among women's occupations, and as a personal accomplishment as well as a means of livelihood it appeals to many different types of girls.

Custom and the climate have decreed different materials for winter and summer, and milliners, therefore, have two distinct seasons in a year, with the demand so concentrated in a few months that between the busy seasons is a period of unemployment for a large proportion of the workers. Even if weekly wage rates be adequate, short seasons of employment mean reduced annual earnings. Hitherto minimum wage laws have dealt chiefly with provisions for regulating weekly rates of pay. How shall the state deal with the more vital problem of securing adequate and regular annual earnings?

These two questions, concerning the application of wage legislation in a notably unstandardized trade and one which is markedly seasonal, are of crucial importance in a consideration of the problem assigned to the Factory Investigating Commission by the New York State Legislature, namely, to gather information regarding wages which will serve as a basis for determining "the advisability of fixing minimum rates of wages or of other legislation relating to wages or conditions of labor."*

To consider this large question in connection with the millinery trade is the more illuminating because of certain other characteristics of the industry besides variety in industrial organization and short seasons. We have already indicated that the trade is largely in the hands of women. Except in the manufacture of hats as distinct from the trimming, competition with men is not an important factor. Women have not secured their place in the trade through underbidding men. To study wages is to ascertain the economic status of women in an occupation always recognized as women's work. In the custom branch of the trade, it is possible without much capital to be an independent worker for private customers. And thus, again, the occupation affords an opportunity to study wages in an industry not yet entirely given over to machine methods and wholesale production.

Facts about conditions in millinery ought to be of immediate practical use also to the organizations which now offer training either to enable a girl to make her own hats or to equip her to enter a millinery shop as an employed worker. Public evening schools, girls' clubs,

* Laws of New York, Chapter 137, March 27, 1913.

and settlements have organized classes for milliners, and, indeed, so great is the demand for them that commercial schools for milliners as well as for dressmakers are by no means few in number. Millinery is one of the first courses included in the curriculum of a trade school. It is worth while to know more of its conditions as a guide to the teachers of these numerous classes and because, also, it is one of the industries in which experiments in industrial education have already been made.

One reason for the choice of millinery as an occupation to be taught in a trade school is that at its best hat-trimming demands a marked degree of artistic ability, a sense of line and form, and an appreciation of color, and the skilled designers in the high grade shops may properly be classed with professional workers. Those who have not the ability to create and design, but are able to copy accurately, often command high salaries, and even the assistant workers, who are carefully supervised by the trimmers, must possess a certain amount of skill. Thus, a low wage scale in millinery shops can not be justified on the ground that no skill is required for the work.

Finally, it may be said that millinery is an occupation which is not localized in any one community. The milliner is needed in the small village as much as in the large cities, and although the conditions of work must, of course, differ greatly in different communities, nevertheless, in considering this industry, we are studying conditions of more than local significance. This applies, of course, chiefly to the custom branch of the trade. It is true that the wholesale work is centered in the large cities, especially in New York.

The Millinery Trade in New York

The best indication of the chaotic condition of the millinery industry is the unsatisfactory type of statistics about millinery given in the United States census and in other official reports. The last count of custom millinery establishments by census enumerators was in 1900, when 517 retail shops employing 2,723 women and 88 men were found in New York.* Thereafter "millinery, custom work," was omitted from the manufacturing census as more properly a hand industry than a manufacturing pursuit. The wholesale millinery trade was enumerated under the general heading of "millinery and lace goods," but the all-inclusive definition of this group of industries renders the figures

* Twelfth United States Census, 1900. Manufactures, Part II, p. 626.

almost useless as information about millinery. In 1910, for instance, "millinery and lace goods" included the manufacture of hand-made muslin and lace curtains; dress, cloak and millinery trimmings; embroideries and crocheted goods; hat and bonnet frames; ladies' belts, collars, neckwear and handkerchiefs; hats, trimmed and untrimmed; laces; plaiting and puffs; ruching and ruffing; and veilings.* Comparison with the census of 1905 indicates another difficulty in that the definition of this industrial group changes more or less from census to census. Moreover, some large millinery establishments manufacture also artificial flowers and feathers, and these workers in allied trades would, in some cases, be counted with milliners.

Because of these difficulties, the most reliable census information regarding milliners is to be found not in the volumes on manufactures, but in the so-called occupational statistics, that is, the data secured in the house-to-house enumeration of the population. The schedule used in this part of the inquiry calls for a statement of the occupation of every member of the family. Undoubtedly, the number reporting themselves as milliners in this house-to-house enumeration is a better index of the size of the trade than the comprehensive group statistics given in the manufacturing census. The occupational data in the census of 1910 showed† in Greater New York 12,096 women and girls listed as "milliners and millinery dealers" and 1,825 as "apprentices to dressmakers and milliners."‡ As about half§ of these apprentices were probably milliners, the total number was approximately 13,000 as compared with 1,470 men "milliners and millinery dealers."§ No men or boys were listed as apprentices in millinery. Thus, in the whole group of 14,500, the proportion of men was a little more than 10 per cent. In Manhattan,¶ the number of women milliners, including about half the group of apprentices to dressmakers and milliners, was about 7,700, and the number of men 1,020, a total of nearly 9,000 milliners, or about two-thirds of the number in that occupation in all the boroughs of the city. Apparently the number has increased rapidly since 1900,

* Thirteenth United States Census, 1910. Abstract with Supplement for New York, p. 693.

† Thirteenth United States Census, 1910. Population, Vol. IV. Occupation Statistics, p. 574.

‡ Since for the entire United States the number of apprentices for dressmakers is about the same as for milliners (Ibid., p. 312), it may be assumed that the same proportion holds for both New York City and Manhattan.

§ Ibid., p. 572.

¶ Ibid., pp. 575-6.

when 7,651 women and 357 men were recorded in the census as milliners in New York.* From 8,000 to 14,500 is an increase of about 80 per cent.

The Industrial Directory published in 1912 by the New York State Department of Labor gives the most recent information regarding the millinery trade.† In the city of New York 860 millinery establishments were counted, employing a shop force of 11,837 of whom 2,952 were men and boys, and 8,885 women and girls.‡ In Manhattan, the number of shops was 628,§ with a force of 2,837 men and boys, and 7,933 women and girls, or 10,770 in all. In Brooklyn the total shop force was only 872, and the combined number in the three other boroughs was but 195. These directory figures show the concentration of important firms in Manhattan and indicate why it seemed wise to limit our investigation to that borough. It should be noted that as the occupational statistics of the census are based on a home-enumeration, they tell us nothing about the location of work-places. Milliners listed in Brooklyn may be working in a Fifth avenue shop in Manhattan. Thus, although according to the census only about two-thirds of the milliners lived in Manhattan, according to the labor department directory 91 per cent worked there. Since ours was a study of shops, not of homes, the directory figures were the correct guide for us.

Scope of Investigation

Because of the chaotic, disorganized state of the millinery industry, it was necessary not only to limit the inquiry to one borough (one which contains, however, ninety per cent of the trade in the city), but

* Twelfth United States Census, 1900. Occupations, pp. 638 and 640. The inclusion of "millinery dealers" in the census of 1910 may account for a small part of this increase.

† These figures, also, must be used with caution in a discussion of the millinery trade, for the list of millinery establishments in the Industrial Directory included also firms engaged in the making of shapes of straw, felt, wool, silk, fiber, or other material, as well as hats for children, and feathers and flowers produced in departments of millinery establishments. Moreover, in more than one instance employers listed in this group manufactured gowns as well as hats, and the report of their number of employees included both dressmakers and milliners. It would be impossible without investigation to eliminate these allied occupations from the list, and count only the milliners.

‡ New York State Department of Labor. Industrial Directory, 1912, Table XI, p. cxcix.

§ Only 160 of these were important enough to list by name and address, while 468 were classed as "small factories." Ibid., p. 334. In Brooklyn, only 6 shops were listed by name (Ibid., p. 149), and in the other three boroughs no milliner attained that distinction.

to define the section of the industry to be studied. The completion of a trimmed hat represents a combination of many different trades, several of which may be carried on by the same firm and all of which might be considered broadly as constituting the millinery industry. These many products include frames of buckram or wire, or pressed hats of velvet, felt, silk, wool, or other material; straw hats made by machinery; trimmings of silk, ribbon, chiffon, or velvet; artificial flowers and feathers; and other millinery ornaments of diverse kinds. The making of pressed hats is a factory industry carried on chiefly by men. Women are extensively employed in machine operating on straw hats, but obviously this work like the making of flowers and feathers and other trimmings is very different from that of the milliner who brings together all these products in the final task of trimming. On the other hand, in many shops, especially in retail work, the frames of buckram or wire are made by hand, straw may be sewed together by hand, a hat of velvet or silk or felt may be hand-made, or flowers and feathers may be prepared, and these processes may then all be part of the day's work of milliners. This persistence of hand work made it difficult to define what we meant when we undertook to investigate the conditions of employment of milliners.

In view of the great difference between the manufacture of products used in millinery, however, and the actual work of bringing them together in a completed piece of headwear, it seemed logical to limit our study to this latter task of hat-trimming, including in this, nevertheless, all of the work which milliners may be called upon to do, such as the making of the frame, or the sewing together of trimmings, even though these same occupations would be excluded from our inquiry when they are carried on in factories by wholesale methods or in a department distinct from hat-trimming. The discovery that men in the millinery industry are employed in the manufacturing branches rather than in trimming led to the further limitation of our inquiry to women workers, though in a very few instances men are engaged in the task of designing. Our investigation, then, is a study of women's wages in shops in which women's hats are trimmed in Manhattan.

Methods of Investigation, Form of Payrolls, and Schedules Used

Believing that irregularity of employment is perhaps the most important factor in determining earnings in the millinery trade, we decided to make our investigation intensive rather than extensive in character, gathering thorough information from a few representative shops instead of attempting to cover superficially a large number. For this purpose we adopted as the basis of our investigation a schedule (Form 5)* designed by the Commission to secure week by week the actual earnings of each worker during the total period of her employment in one establishment in the course of a year. Our investigation was made between January 1 and February 15, 1914. In each establishment we studied the entire payroll for the calendar year 1913, copying, as we have indicated, the total earnings week by week of each worker employed at any time during that period, whether for one day or 52 weeks.

Some description of the diverse forms of payrolls found in millinery shops is important both in interpreting wage statistics in this study and in discussing future wage investigations. In some shops visited, no payroll was found, the stubs of check books showing merely the total weekly outlay for wages. But the absence of a payroll was not the only difficulty encountered. The payrolls themselves were often obscure for our purposes. Of all that we examined, just one stands out in memory as a model of convenience for the investigator seeking facts for a continuous, individual record. This was a loose-leaf book with a separate sheet for each employe. On the first line was a space for the full name, and on the second a record of the number of the worker, the department in which she worked, and the dates of entering and leaving. The column headings gave the date of payment, rate, lost time, net earnings, charges, amount paid, and space for a weekly signature after the words "received the amount opposite my name." These columns were repeated twice on the same page, giving space for a consecutive record many weeks in length. When a girl is laid off, her record is filed and can be continued if she returns. It is unnecessary to copy the names and rates of pay of the workers weekly, as is done in those shops using an ordinary blank book with a separate page for each week instead of a page for each employe. On the other hand, the weekly list is more convenient for securing totals. To avoid the necessity for copying names or numbers every week, some books had a stub arrangement so

*See page 10 for copy of this form.

that the earnings for a number of weeks, sometimes four, sometimes thirteen, could be entered in columns opposite a single list. One large firm had a loose-leaf book with a page for a week's earnings which matched a list, renewed twice a year.

The only item of information common to them all was the wage received. In some was recorded the full name and in one instance the address was entered once each season. In others only the first name appeared. In establishments using a time clock,—with a card stamped automatically when the worker punches it at the time of entry and when she leaves,—it is usual to designate each worker on the payroll by her time clock number, although sometimes the name also appears. The actual time of work is then recorded and deductions made for days lost and, often, for minutes of tardiness. This careful checking of the time applies, however, only to the so-called week workers, those who receive a definite amount per week. No such entry of hours is made for those whose earnings are calculated on the piece-work basis, whereby a definite rate is paid according to the number of hats trimmed, and time does not enter into the calculation of earnings. Piece workers are often designated by number only.

The use of numbers instead of names makes the tracing of a worker through a record of several weeks exceedingly difficult for the reason that numbers are reassigned repeatedly in the course of a year. Marked differences in earnings, the statement of the bookkeeper, or long lapses of time between earnings were the chief checks on accuracy of identification in those shops in which the names did not appear on the payrolls. The same checks were necessary when only the first names were used. One could not be sure always that Annie in the autumn was the same Annie as in the spring.

The lack of a time record for piece workers made it impossible also to determine whether the earnings represented a full week's work, or overtime, or two days of employment. Home work also was an unrecorded factor sometimes in apparently high earnings, since in some shops the girls take work home at night and the family may help. These products will appear only in the total week's output for each worker. Another serious difficulty was the entry of a single payment for a team of two or three workers. This was encountered only among piece workers, never week workers, and then only in one or two shops, and it was obviated by searching inquiry on the part of the investigators, but the possibility of error was not thereby entirely eliminated.

Numerous other annoyances and difficulties beset us in the endeavor to secure accurate data from the payrolls. Sometimes part payments were made in hats or millinery trimmings. Sometimes a worker drew out her wages in advance, and was paid from the cash box with an entry in the daily cash account but none on the payroll. In one shop, the dressmaking department worked nine hours a day, fifty-four a week, and the milliners eight and one-half a day and fifty-one a week. For the sake of uniformity, the nine-hour standard was used throughout the payroll. For the milliners this meant eight and one-half hours. An entry of eight and three-quarters hours meant that a milliner had been late fifteen minutes, and that her day's work was eight and one-quarter hours long. A twenty-two and a half hour week was obviously two and a half days on the fifty-four hour basis or twenty-one and one-quarter hours in a fifty-one hour week. In a wholesale factory until a few weeks before the investigation the method of entering piece workers' earnings had been to record totals only, and to study individuals it was necessary to go back to the individual slips made out in the workroom to show piece workers' output. These were resurrected in dusty files from the vaults. Perhaps the climax of our difficulties came in the discovery of two instances in which the payroll was in cipher. CAE indicated \$6 and KTA, \$2.50. In one of these shops the rate only was shown on the payroll with the amounts deducted for any cause such as tardiness, and the actual earnings did not appear, the only instance of that kind which we encountered.

As social legislation advances, and commissions are appointed to secure information about industrial establishments, the absence of uniformity and the lack of accuracy in keeping payrolls becomes a serious matter. Legislation, prescribing some method of recording this information, is urgently needed but should be framed only after full consideration of the many uses to which it may be put. For instance, we were told that the form which we found most convenient, a page for each worker, had proven unmanageable by agents in connection with insurance for workmen's compensation, who needed to know the total payroll.

The material secured from the payrolls and reported on Form 5 showed rates of pay and actual earnings of individual employees. It did not show age, nativity, or length of experience of the workers. It

was to ascertain these facts that we copied the current payroll, showing earnings and rates of pay for each worker (Form 2), and, using this current payroll as a basis, we distributed in the workroom small cards (Form 1), calling for personal information to be supplied by those employed at the time of the investigation, later matching up Forms 1 and 2 and thus making possible the correlation of wage statistics and personal information.

In addition to securing these records, we copied the total payrolls week by week and counted the total number of employees each week throughout the year, thus getting information as to the steadiness of the trade. Through interviews with employers and observation of the shops we also ascertained such general facts as methods of hiring workers and determining wages, processes of work, plans for training learners, hours of labor and overtime, and workroom conditions. We did not undertake interviews with workers, as in our preliminary study we had already secured enough information by this method to serve as a check on the later investigation.* Table 1 shows the number of shops investigated in different branches of the trade, the maximum force during the year, and the number of records secured.

TABLE 1.—NUMBER OF SHOPS INCLUDED IN THIS INVESTIGATION, MAXIMUM FORCE EMPLOYED, AND NUMBER OF RECORDS SECURED, BY BRANCHES OF THE TRADE

BRANCHES OF THE TRADE	Number of shops for which records were secured	Maximum force	RECORDS SECURED					
			Workers' reports		Current payrolls		Yearly payrolls	
			Shops from which secured	Records received	Shops from which secured	Records received	Shops from which secured	Records received
Retail.....	29	839	29	470	29	546	19	1,143
Wholesale.....	28	1,711	25	893	27	1,405	21	2,840
Total.....	†57	2,550	54	1,363	56	1,951	40	3,983

* Since the completion of the payroll study we have visited some of the workers whose names were secured in the shops, but as yet this inquiry has not been extensive enough to present the results in this report.

† In all 65 firms were investigated, but of these two had failed and were out of business, one made only straw or felt hats, while two never employed more than one worker, and the remaining three did not keep permanent payrolls.

We secured records from 57 shops, of which 29 sold hats at retail and 28 at wholesale.* The payrolls for the current week were copied in 56 of them, and, thus, information regarding rates of pay and actual earnings in one week was secured for 1,951 workers. To match these, cards were filled out by girls in the workroom to the number of 1,363, but, for various reasons, these reports from workers could not be secured for 588 of the 1,951 on the current payolls. In some shops, for instance, the employers objected to their distribution and because of this lack of co-operation on their part, satisfactory returns could not be secured. In other cases, some of the girls whose names had appeared on the payroll had left since the last pay-day, or were temporarily absent. Transcriptions of the payroll for the entire calendar year were made in 40 shops, including one in which the current payroll was not copied. In the other 17 shops investigated, the statistics for the whole year were not available, because these firms did not keep payrolls showing individual earnings or had not preserved them for the year, or, in a few cases, had changed hands or had been established within twelve months. In the 40 shops studied for the year the maximum force in the busy season was 2,016, but the total number of names appearing on the payrolls at any time in the twelve months was 3,983.

This last number represents really the total number of jobs held in these shops rather than the total number of workers, for in some instances we found the same worker appearing on the payrolls of different establishments and undoubtedly other cases of the same kind would have been discovered had it been possible to match up records with any degree of accuracy. Obviously, however, even the appearance of the same name is not conclusive identification unless the name or the work-record is unusual enough to warrant such an assumption. The fairest figure to use in estimating the proportion of the trade investigated is not the total number of names on the payrolls in a year, which is indicative rather of fluctuations in employment and changes in the force, but the maximum number employed in the busy season in the shops investigated, that is, 2,550. According to the Industrial

* In the investigation of wages in department stores made by the Factory Investigating Commission, payroll statistics were secured for the millinery workrooms in twenty-one stores in New York City and thirty-four stores in eight other cities of New York State, namely, Buffalo, Rochester, Syracuse, Utica, Schenectady, Albany, Troy and Kingston. The figures for New York City appear in Appendix B, pp. 449-459, and for other cities in New York State, in Appendix C, pp. 460-67.

Directory already quoted the number of women milliners at work in Manhattan was 7,933. (Page 365.) Thus we investigated 32 per cent of the milliners employed in Manhattan, or 29 per cent of the 8,885 counted by the labor department throughout the city.*

Numbers alone, however, prove nothing as to the representative character of such a study. In a trade in which conditions and standards vary as widely as in millinery it was important to select for study a group of shops which should contain in miniature, as it were, all the diversity of types found in the trade itself. As the chemist can determine the composition of the whole body of water in a reservoir by analyzing a small sample, so the investigator of industry may legitimately portray all the essential facts in a trade by intensive study of a small group, provided the group be wisely selected.

Both chance and discretion were factors in our selection. We first made a card catalogue of millinery shops listed in the Industrial Directory of the New York State Department of Labor, arranged the cards by streets and numbers, and drew out every fifth card. These were then compared with the records of our previous investigation of 229 shops, and by a process of selection and substitution, a list of about 75 establishments was finally prepared. Our investigators soon discovered that the small neighborhood shops of the Third Avenue type must be eliminated because no payroll records were kept in them. This very practical difficulty has resulted, of course, in limiting our study to those establishments which are large enough and well-organized enough to keep wage records.

To divide millinery shops in New York, or even the limited number investigated by us, into but two groups, wholesale and retail, is to obscure the many differences between establishments which may be alike only in the method of distributing their goods, whether direct to private customers or through the more or less complicated selling machinery of the wholesale trade. The group which we investigated included large and fashionable establishments on Fifth Avenue, aspiring shops on the side streets as close as possible to the highway of fashionable trade but not yet fully "arrived," the less aspiring firms

* If the census figures showing 13,000 milliners in New York City be used, the proportion investigated was twenty per cent. This, however, is a less accurate figure, since the census counted all milliners whether working in shops or at home, whereas the Industrial Directory included only shops employing one or more workers. It was the shop which was the unit in our study.

on streets and avenues farther removed from the leaders of the industry, the small shop on Third avenue, the big supply house on lower Broadway, and the wholesale establishment which has moved uptown, portending a general northward move for wholesale millinery as for other industries on Manhattan Island, the more humble wholesale factory on Division Street which ships its cheap products to Texas and other distant states, and on the same block the typical Division Street retail shop with its unique method of soliciting custom by stationing on the sidewalk a "puller-in"—a stalwart woman who seizes passers-by and drags them into the store, there to be dealt with by an equally importunate saleswoman. In reality we have three distinct methods of classifying millinery shops: first as to method of selling, that is, as wholesale or retail; second, as to location, with differences so marked in different sections of the city as to make the name of the street—Fifth Avenue, Third Avenue, Grand Street, Division Street, or Broadway—a descriptive adjective conveying a distinct impression to anyone familiar with these localities; and, third, as to grade of hat made, with dozens all alike, of so-called "ready-to-wear" headgear, at one end of the scale, and at the other the unique and distinctive creation of the expert designer.

Although it is a bold investigator who would undertake to classify women's hats, it is desirable to understand that the terms "ready-to-wear" and "trimmed" hats do connote differences in the processes of work. The distinction arises from the fact that women buy hats in various stages of completion. Simplest of all is the wire or buckram frame which may be bought in a department store and which must be covered with silk or velvet or even straw purchased by the yard, and trimmed with flowers, feathers, or ribbon, also purchased separately. Next above it in order is the so-called pressed or machine-made hat of straw, silk, velvet, or other material which is unlined. The purchaser becomes designer, improver, preparer, milliner, and trimmer all in one. The demand for cheap hats which do not require the milliner's skill to make them wearable has created the ready-to-wear product which is lined in the factory and so designed that the arrangement of the material itself constitutes the trimming, with possibly the addition of a bow or a buckle or some other ornament. At the top of the scale, if complexity be the measure, is the trimmed hat, on which the arrangement of millinery ornaments—ribbon, feathers,

flowers — has claimed the chief attention of the milliner. She may, or may not, have made the hat itself. It has more individuality than the ready-to-wear product, and is not usually duplicated so many times in the factory.

Processes of Work

As diverse as the different branches of the trade are the demands made upon the workers. Two important factors determine workroom requirements. They are, first, the style of the hat, and second, the method of its transmission through different types of shops. The semi-annual migration of leading milliners from New York to Paris testifies to French leadership in designing fashionable headgear. From the picture galleries in France, from stage costumes in a popular play, from the newest gowns of French society leaders, the Parisian designers get their inspiration. They plan hats suited to a certain period in the history of dress. They pay minute attention to line and color, the texture of the ribbon and the design of flower or feather to be used as trimming. The New York milliners return from Paris in the very early spring and autumn each year in time to sell first to "the trade," the wholesale dealers whose season precedes the retail buying. The choicest hats they keep as models for their own workrooms. The trimmers and designers, keeping close watch of any changes of style in France, and of the taste of customers in the United States, proceed to adapt foreign styles to American needs. The trend in Paris, however, is the supremely important issue. One Fifth Avenue milliner kept her employes at work ten days making scarfs because a rumor had arisen that the brims in Paris would turn up at the back and she dared not have any hats made until the rumor could be verified.

In this all-important work of creating an artistic and stylish product a well-organized workroom is essential. A designer is indispensable, for upon her — or sometimes upon him — devolves the task of supplying every customer with a hat which is stylish, but which has no counterpart. Expert trimmers carry out their designs. Under them must be employed — at the lowest rung of the ladder — apprentices to make bands and learn to put in linings; next above them, improvers to shirr chiffon, line the hats, and make folds; preparers, who are a little more expert than improvers but who do essentially the same work; and

makers * to construct the frames which shall follow exactly the measurements necessary to create a hat in right proportions, to cover the frames with crinoline, and to prepare the hat in all other particulars for the final work of the trimmer. Neatness and accuracy and delicacy of touch are essential requirements, and no careless worker will be able to hold her position in a corps of milliners who produce hats ranging in price from \$50 to \$150 or more.

In the cheaper grade of retail shops, the division of work is essentially the same as in the fashionable establishments — that is to say, a hat is trimmed for a private customer, prospective or actual, but designers and artistic trimmers are not found in them, and the workmanship is less accurate and careful. "The madame" plans the designs after frequent inspection of Fifth avenue windows and costume magazines, or even a brief period of employment in an establishment in which the season begins earlier than in her own. When a shop becomes a little more prosperous a trimmer capable of designing hats may be employed for a week or a month at the beginning of the season.

The best of the wholesale milliners also go to Paris while others buy their models from importers. Some of them create models as distinctive and unique as in retail shops. In others, of cheaper grade, hats are sold by the dozen or the gross, and uniformity in the making is necessary. From this fact arises the need for copyists — workers who can make a hat from frame to trimming, copying exactly the model before them. The more uniform the style the less is the need for the corps of apprentices, improvers, preparers, makers, trimmers and designers.

From the uniformity of design develops also a subdivision of processes somewhat like that in clothing shops. In one typical wholesale shop, for instance, in which medium grade "tailored hats" are made, that is, the ready-to-wear type, the workers are divided into distinct groups according to processes. One group cuts out the requisite amount of straw and braid, silk and lining, measuring the amount needed for one hat and then duplicating the parts needed for the total amount of the order for that particular model. The material for each hat is then rolled together and a dozen or more sets given to each worker. Other

* These workers are usually called "milliners," but, as this word can be used more conveniently to designate the entire group, we have substituted the less common name of "maker" for the girl whose occupation is here described.

workers make linings by machine or tuck or hem materials like chiffon or silk for trimming. Copyists then make the entire hat, duplicating it many times, assembling the parts already made—to use a factory term which indicates how mechanical this process may become. It will be noted that in such a shop the description of processes already given does not apply, and that new processes like cutting and machine sewing must be added to our list. This kind of machine sewing is not the same as the making of straw hats by machine, which although it is a part of the millinery industry, as we have explained, is not included in the branch of the trade which we have designated as hat-trimming.

It should be observed that the subdivision of processes which we have described as characteristic of certain wholesale factories is radically different from the division of work in a retail shop or in a wholesale establishment where high grade hats are made. In the retail shops the workers are grouped together in the making of one hat. In the typical cheap wholesale workroom, the parts of the hat are divided between separate groups of workers. The difference is fundamental. The latter plan results in specialization. The former means that each worker in the group has the advantage of watching every other part of the hat-trimming, and increase in experience leads to more and more responsibility. The maker differs from the preparer and the preparer from an improver rather in length of experience and adaptability than in type of work, and every maker must have been first an apprentice, then an improver, then a preparer, or at least have had an equivalent experience even if she did not have these titles.

As an example of the methods of grouping the workers in high grade shops, we may describe one of the most fashionable of the retail establishments. A trimmer or a designer is placed in charge of each table, with six or seven girls working under her direction, including usually one apprentice, two improvers, two expert preparers, and two makers. Sometimes four makers are found in one group, instead of two makers and two preparers. In the busy season six or seven "tables" or groups of workers are kept busy. Each group is self-sufficient, entirely responsible for the designing and making of the hat from lining to trimming. It follows that an apprentice may get better training at one

table than at another according to the skill of the trimmer or designer in supervising the girls for whom she is responsible. So self-sufficient are these groups in some shops that the length of the season may differ from table to table if one trimmer takes a longer vacation than others, or a designer spends a longer or shorter time in Paris.

Table 2 shows the types of workers employed in another retail shop in which this same plan is carried out.

TABLE 2.—DESIGNATION OF OCCUPATIONS OF WOMEN EMPLOYED IN ONE RETAIL MILLINERY ESTABLISHMENT, FEBRUARY 2, 1914

OCCUPATION	Women
Forewoman and assistant forewoman.....	2
Designers.....	3
Copyists.....	5
Makers.....	63
Improvers.....	5
Apprentices.....	10
Feather hands.....	6
Stock girl.....	1
Errand girl.....	1
Shopper.....	1
Total.....	97

The apprentices number approximately 1 in 10. The makers constitute the largest group, numbering 63, while only 5 improvers were employed. This was due not to any difference in plan of work as compared with shops employing more equal groups of improvers, preparers, and makers, but was indicative rather of a difference in naming divisions of work. The makers represented a wide range of earnings and experience and a more exact assignment of titles would have placed some of them in the ranks of improvers or preparers. In this shop models are made to be sold to other establishments and these are duplicated; hence the employment of five copyists. The six "feather hands" prepare the feather trimmings which some other retail shops always purchase from feather manufacturers. The forewoman and her assistant are executives in charge of the workroom, with such duties as engaging workers, attending to orders, marking hats, and keeping account of the cost of materials for each hat. They need not necessarily be trained as milliners. The stock girl works under the direct supervision of the forewoman, taking care of materials used in the

workroom. The functions of errand girl, shopper, and designer are sufficiently obvious to require no explanation. The significant point to emphasize is the interrelation of the workers who complete a single hat for an individual customer as opposed to the subdivision of parts of dozens of hats of uniform style among separate groups, or, on the other hand, the complete copying of a model several times over by one worker. As an example both of subdivision and of extensive employment of copyists, Table 3 shows the distribution of the workroom force in a wholesale establishment.

TABLE 3.—DESIGNATION OF OCCUPATIONS OF WOMEN EMPLOYED IN ONE WHOLESALE MILLINERY ESTABLISHMENT, FEBRUARY 7, 1914

OCCUPATION	Women
Forewomen.....	2
Designers.....	2
Trimmer.....	1
Copyists.....	46
Makers.....	36
Preparers.....	4
Apprentices.....	4
Cutters.....	2
Liner.....	1
Machine operators.....	2
Stock girls.....	7
Total.....	107

A little more than two in five are copyists. Cutter,* liner, and machine operator are specialists. The large group of apprentices, preparers, and makers is to be accounted for by the fact that even in wholesale by no means all of the hats are of the ready-to-wear type. Many are made by much the same process as in retail shops. It should be understood that the relative importance of different processes varies from year to year with changes in the fashion. Especially in wholesale the make-up of the force varies with the comparative demand for hand-made or for blocked or pressed hats. In the year 1913 hand-made hats were fashionable, and consequently more hand-workers were employed.

We have dwelt at some length on the division of labor in the trade because it is necessary to an understanding of the types of efficiency

* The greater part of the cutting, as well as the frame making in wholesale shops, is usually done by men.

required, and therefore is closely related to a discussion of wages, and because, also, it serves as a warning in interpreting information concerning occupations in the industry,—using the word occupation in the sense of the task assigned to a worker. Workers called by the same name have different duties in different types of shops. Nevertheless, some degree of classification by occupations is desirable in relation to wage statistics. Table 4, therefore, showing the distribution of the workers investigated in occupational groups is presented with this fair warning against drawing hasty conclusions from the data. The table is compiled not from the records of all employes in a year but from the transcriptions of the current payrolls, and thus shows the proportion employed at any one time in each occupation.

TABLE 4.—OCCUPATIONS OF WOMEN EMPLOYED IN 56 MILLINERY ESTABLISHMENTS BY MAIN BRANCHES OF THE TRADE, ON CURRENT PAYROLL, 1914

OCCUPATION	WOMEN EMPLOYED IN			All women
	Retail	Retail — wholesale	Wholesale	
Forewomen	5	5	20	30
Assistant forewomen		4	5	9
Designers	11	16	45	72
Trimmers	10	5	62	77
Copyists	16	18	702	736
Makers	81	177	72	330
Preparers	19		270	289
Improvers	24	38	16	78
Apprentices	27	29	41	97
Machine operators			72	72
Stock and floor girls	10	10	31	51
Feather and flower hands	2	22	3	27
Cutters			21	21
Crown sewers			11	11
Errand girls	5	1	5	11
Crimpers			9	9
Shoppers	1	6	2	9
Packers			7	7
Straw sewers			5	5
Wire-frame makers			4	4
Helpers	3			3
Liners	1		1	2
Examiner			1	1
Total	215	331	1,405	1,951
Number of shops	22	7	27	56

In this table we have distinguished the shops as wholesale, retail, and retail-wholesale, the last signifying shops really of custom grade, which do some work, such as the making of models, for other milliners. The significance of this third division will become apparent in the discussion of the length of the seasons, as the combination of retail-wholesale tends to prolong them.

Approximately half the workers recorded on the payrolls in wholesale shops were copyists, while in retail and in retail-wholesale, makers formed the predominant group. It is significant that, among these 1,951 workers, only a little over 100 were apprentices or errand girls, this number representing the total found on the payrolls at the date of our investigation.

Wage Statistics Secured

We secured three distinct sets of wage statistics in this investigation. It will be recalled that, first, we copied the payrolls for the calendar year 1913, using a separate card for each worker and entering both earnings and rates of pay each week as long as her name appeared on the records. Second, we copied the current payrolls, rates of pay and actual earnings, for each girl employed in the workroom at the date of the investigation, the dates varying with the dates of our visits to different shops, and correlated this information with facts reported by the girl herself on a card showing her age, nationality, and length of experience. Third, we recorded for each week in the year the total wages paid by the firm and the total number of employees. This last information is useful in showing seasonal fluctuations. It does not show individual earnings. The second set of statistics shows individual wage rates and earnings in a single week. The first are more comprehensive, indicating not only rates and earnings for one week but the number of weeks each worker appeared on the payroll in the twelve months for which records were taken, the fluctuations in earnings and the total receipts from one shop during the period of employment in the calendar year.

The method of tabulating these yearly payroll statistics was first to determine the total earnings of each worker and then to divide this amount by the number of weeks of employment, in order to find out the "average earnings" during the specified period. It should be

pointed out that although the record card was headed "individual annual earnings," no assumption regarding the income of the worker is safe since the data really show only the earnings in one job in a selected period of time and no information is available as to other work secured elsewhere in the year, or even employment in other establishments or possibly for private customers. Sometimes a girl may work by day in a wholesale shop and then serve as salesgirl or trimmer in a neighborhood millinery store with an extensive evening trade. Had it been possible to trace workers from one payroll to another so that an accurate record of the entire year could be obtained, the data would be of great value, but so far as we know such a plan has never yet proved successful, although tried by several investigators.*

Wage Rates

As the facts about earnings throughout a selected period of employment are complicated by the question of duration of employment, it may be well to present first the statistics copied from the payroll for the current week and later correlated with personal facts secured from the girls found in the workroom at the time of the investigation. The total number of entries copied from the current payroll was 1,951. Table 5 shows the wage distribution by main branches of the trade, based on wage rates, not on earnings.

* An interesting experiment of this kind was tried in a recent investigation of wages in the wholesale dress and waist industry in New York. The inquiry was financed jointly by the trade union and the employers' association and was undertaken for the purpose of determining the proper wage scale to be adopted by agreement between employers and employees. Yet the effort to trace a worker from one payroll to another and to deduce from this process a conclusion regarding the annual income proved fruitless. Workers forget to mention all of the shops in which they have worked in a year, and payrolls vary so in form that identification of a worker is practically impossible.

TABLE 5.—RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE, CURRENT PAYROLL, 1914

RATE OF WAGES	WOMEN EMPLOYED IN			All women
	Retail	Retail-wholesale	Wholesale	
Less than \$2.....	4	.....	.....	4
\$2 and less than \$2.50.....	6	3	4	13
\$2.50 and less than \$3.....	1	8	.....	9
\$3 and less than \$3.50.....	10	7	12	29
\$3.50 and less than \$4.....	5	3	.....	8
\$4 and less than \$4.50.....	5	12	20	37
\$4.50 and less than \$5.....	3	1	4	8
\$5 and less than \$5.50.....	11	7	34	52
\$5.50 and less than \$6.....	5	3	4	12
\$6 and less than \$6.50.....	8	11	56	75
\$6.50 and less than \$7.....	1	1	2	4
\$7 and less than \$7.50.....	10	20	61	91
\$7.50 and less than \$8.....	3	.....	11	14
\$8 and less than \$9.....	20	17	100	137
\$9 and less than \$10.....	17	16	95	128
\$10 and less than \$11.....	9	30	94	133
\$11 and less than \$12.....	5	8	51	64
\$12 and less than \$13.....	22	46	111	179
\$13 and less than \$14.....	8	16	56	80
\$14 and less than \$15.....	14	27	44	85
\$15 and less than \$16.....	10	27	47	84
\$16 and less than \$18.....	12	12	14	38
\$18 and less than \$20.....	6	4	18	28
\$20 and less than \$25.....	3	16	17	36
\$25 and less than \$30.....	5	9	19	33
\$30 and less than \$35.....	1	7	11	19
\$35 and less than \$40.....	4	2	7	13
\$40 and over.....	7	18	9	34
Total.....	215	331	901	*1,447
Median wage†.....	\$9.91	\$12.40	\$10.51	\$10.77

Of 215 girls in retail shops, 72, or 33 per cent, were rated at less than \$8 a week, and 92, or 43 per cent at \$12 or more. In retail shops having also a wholesale trade, 76 or 23 per cent received less than \$8 and 184 of 331, or 56 per cent, were in the group rated at \$12 or more, and in wholesale factories the group receiving \$12 or more among week workers alone numbered 353 of 901, or 39 per cent, while those receiving less than \$8 numbered 208, or 23 per cent. Of

* Of the total of 1,951 women whose names appeared on the current payroll, 504 were piece workers in wholesale shops whose rates of pay could not be ascertained since they are determined per piece and not per unit of time.

† See footnote, page 383.

the 1,405 workers in wholesale, 504 were piece workers so the weekly wage rate could not be indicated for them. It is in wholesale houses that the piece workers are found. Obviously the piece-work system applies best where the same model is duplicated many times. When but one hat of a kind is made, as in retail shops, the wages are all based on weekly rates. The median wage rate,*—half the workers receiving less and half receiving more,—was \$9.91 in retail, \$12.40 in retail-wholesale, \$10.51 in wholesale, and \$10.77 for the three groups combined.

Actual earnings differ in many instances from wage rates. They are equal only when the worker is employed full time, without any deductions or additions to her wages. Table 6 shows the actual earnings of the same group that appeared in Table 5, excepting that of the 1,951 included in that table, 82 were piece workers whose earnings were not included in Table 6 because during the week investigated they had been employed only five days, as that week happened to include a legal holiday. It will be recalled that the dates of these current payrolls varied with the dates of our shop visits, and, since in every other establishment the week was a normal one with six working days, it seemed fairer to exclude these five-day piece workers. The time workers in this shop happened to have been paid for the holiday, and hence were counted in our statistics. Thus the number in Table 6 is 1,869.

* The formula used throughout the report in calculating the median was as follows: (King, W. I.: Elements of Statistical Method, p. 129.)

Let M = median

c = class interval of the class containing the median

k = the lower limit of the class

f = the number of items in the class

i = the number of items up from the lower limit of the class at which the median item occurs.

Then

$$M = k + \frac{c(2i - 1)}{2f}$$

For example, in Table 5, in computing the median for the total column,

$$c = \$1$$

$$k = \$10$$

$$f = 133$$

$$i = 103$$

$$\begin{aligned} M &= \$10 + \frac{\$1(2 \times 103 - 1)}{2 \times 133} \\ &= \$10 + \frac{\$205}{266} \\ &= \$10.77 \end{aligned}$$

TABLE 6.—ACTUAL EARNINGS DURING ONE WEEK, OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE, CURRENT PAYROLL, 1914

WEEKLY EARNINGS	WOMEN EMPLOYED IN			ALL WOMEN	
	Retail	Retail-wholesale	Wholesale	Number	Per cent
Less than \$2.....	6	2	41	49	5.9
\$2 and less than \$2.50.....	8	8	22	38	
\$2.50 and less than \$3.....	2	8	13	23	
\$3 and less than \$3.50.....	10	11	27	48	8.7
\$3.50 and less than \$4.....	4	3	15	22	
\$4 and less than \$4.50.....	6	12	39	57	
\$4.50 and less than \$5.....	3	2	27	32	4.8
\$5 and less than \$5.50.....	9	10	53	72	
\$5.50 and less than \$6.....	7	5	32	44	
\$6 and less than \$6.50.....	8	9	68	85	6.3
\$6.50 and less than \$7.....	4	4	25	33	
\$7 and less than \$7.50.....	9	19	59	87	
\$7.50 and less than \$8.....	4	6	48	58	7.8
\$8 and less than \$9.....	23	12	140	175	
\$9 and less than \$10.....	15	17	129	161	
\$10 and less than \$11.....	7	23	124	154	14.6
\$11 and less than \$12.....	9	11	98	118	
\$12 and less than \$13.....	16	40	106	162	
\$13 and less than \$14.....	10	18	65	93	17.5
\$14 and less than \$15.....	12	24	37	73	
\$15 and less than \$16.....	6	23	43	72	
\$16 and less than \$18.....	13	11	25	49	7.8
\$18 and less than \$20.....	4	5	15	24	
\$20 and less than \$25.....	3	13	28	44	
\$25 and less than \$30.....	6	9	18	33	4.1
\$30 and less than \$35.....	1	7	10	18	
\$35 and less than \$40.....	5	2	7	14	
\$40 or more.....	5	17	9	31	1.6
Total.....	215	331	1,323	*1,869	100.0
Median earnings.....	\$9.30	\$12.09	\$9.41	\$9.69	

For the wholesale shops this table is much more satisfactory than the preceding one, since in this case the distribution by earnings of piece workers as well as week workers can be shown. For the whole group, the median earnings were \$9.69. For retail workers the median was \$9.30, for retail-wholesale, \$12.09, and for wholesale \$9.41. Although the range of earnings is wide, varying from less than \$2 to more than \$40 a week, the proportion earning \$15 or more is not large,—15 per cent. Nevertheless it is obvious that millinery is not one of the very

* Of the total, 1,951, for whom the rates of wages were secured, 82 were piece workers, whose earnings were not included as they had been employed only five days during the week on account of a legal holiday, and their earnings were not strictly comparable with those in shops having a normal six-day working week.

low paid industries for women. The range of earnings would seem to indicate also that skill or length of experience affects earning capacity, since in industries in which the process requires little skill and in which experience counts less than some other factors like speed, endurance, or muscular development, variety in wages is less marked. Whether this hypothesis is correct, and whether length of experience does count can best be shown by Table 7, giving rates of wages, and Table 8, actual earnings by years in the trade. The number considered is less than in the preceding tables because they represented payroll transcriptions, and the tables which follow are based on the cards filled by the girls in the workroom. As already explained, not all those listed on the payroll filled these cards.

TABLE 7.—WEEKLY RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY YEARS OF EXPERIENCE IN THE TRADE, CURRENT PAYROLL, 1914

WEEKLY RATE OF WAGES	WOMEN EMPLOYED IN THE TRADE							Total
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20
Less than \$2	4							4
\$2 and less than \$3	15	1						16
\$3 and less than \$4	22	7						29
\$4 and less than \$5	16	9	6					32
\$5 and less than \$6	10	14	14	1	2			44
\$6 and less than \$7	6	12	23	12				53
\$7 and less than \$8	7	11	20	34	10			82
\$8 and less than \$9	3	6	12	56	14	7		102
\$9 and less than \$10		2	6	40	19	9	4	80
\$10 and less than \$11		1	2	36	31	8	6	87
\$11 and less than \$12	1		3	9	13	12	5	44
\$12 and less than \$13	1		2	14	29	54	17	126
\$13 and less than \$14				4	19	24	14	62
\$14 and less than \$15					13	28	23	70
\$15 and less than \$16					7	19	27	59
\$16 and less than \$18				1	4	8	12	30
\$18 and less than \$20					1	5	8	17
\$20 and less than \$25						2	15	26
\$25 and less than \$30				1	3	4	3	16
\$30 and less than \$35						2	8	15
\$35 and less than \$40						2	4	10
\$40 and over						2	9	23
Total	85	63	88	213	166	186	159	41
								*1,026

* Of the total, 1,951, for whom the weekly rates of wages were secured, 588 did not fill Form 1. Of the remainder, (1,363), 331 were piece workers and 6 did not state years in the trade.

TABLE 8.—ACTUAL EARNINGS DURING ONE WEEK OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY YEARS IN THE TRADE, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED IN THE TRADE							
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20
Time workers	7	1		1				
Less than \$2.....	21		3	1		1		
\$2 and less than \$3.....	16	11	1	1		1		
\$3 and less than \$4.....	15	8	5	1		1		
\$4 and less than \$5.....	9	15	23	12	2	2		
\$5 and less than \$6.....	8	12	22	13	2	2		
\$6 and less than \$7.....	4	11	14	42	11	2	3	2
\$7 and less than \$8.....	2	2	10	55	18	9	6	1
\$8 and less than \$9.....	1	2	4	30	22	12	3	
\$9 and less than \$10.....		1	2	33	26	16	7	2
\$10 and less than \$11.....			3	7	14	17	8	
\$11 and less than \$12.....			1	10	26	43	15	3
\$12 and less than \$13.....				4	19	18	22	1
\$13 and less than \$14.....					12	20	18	4
\$14 and less than \$15.....					6	17	21	2
\$15 and less than \$16.....				1	4	8	10	2
\$16 and less than \$18.....				1		6	7	1
\$18 and less than \$20.....					1	1	14	5
\$20 and less than \$25.....					3	4	4	4
\$25 and less than \$30.....				1		2	8	3
\$30 and less than \$35.....						2	4	4
\$35 and less than \$40.....						2	8	7
\$40 or over.....								
Total.....	85	63	88	213	166	186	150	41

20 | 1,000

TABLE 8.—ACTUAL EARNINGS DURING ONE WEEK OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY YEARS IN THE TRADE, CURRENT PAYROLL, 1914—Continued

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED IN THE TRADE								All women	
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20		20 years or more
Piece workers										
Less than \$2.....	1	1	1	1	.....	1	.....	.....	5
\$2 and less than \$3.....	3	.....	2	.....	1	.....	1	.....	7
\$3 and less than \$4.....	1	3	.....	2	.....	.....	1	7
\$4 and less than \$5.....	1	1	1	1	3	4	1	.....	12
\$5 and less than \$6.....	1	1	5	2	4	3	.....	3	19
\$6 and less than \$7.....	5	4	2	4	3	.....	3	21
\$7 and less than \$8.....	1	1	3	2	6	2	1	.....	16
\$8 and less than \$9.....	3	7	6	4	5	2	.....	28
\$9 and less than \$10.....	5	8	3	8	7	1	2	34
\$10 and less than \$11.....	2	4	9	6	3	1	.....	25
\$11 and less than \$12.....	1	1	3	9	5	5	2	.....	26
\$12 and less than \$13.....	1	.....	4	3	3	5	2	1	19
\$13 and less than \$14.....	1	.....	.....	2	1	.....	4
\$14 and less than \$15.....	1	.....	1	1	2	2	8
\$15 and less than \$16.....
\$16 and less than \$18.....	2	2	.....	.....	.....
\$18 and less than \$20.....	1	.....	.....	.....	.....	1	5
\$20 and less than \$25.....	2	.....	1	1	.....	1
\$25 and less than \$30.....	1	.....	.....	.....	.....	1	1
\$30 or over.....
Total.....	9	21	49	202	41	49	44	15	16	244
Grand total.....	72	109	262	207	235	203	41	56	41	*1,270

* Of the total, 1,363, for whom workers' records were secured, 11 did not state years in the trade and 82 were piece workers, whose earnings were not included as they had been employed only five days during the week on account of a legal holiday.

TABLE 8A.—MEDIAN* WEEKLY RATES OF WAGES AND EARNINGS OF WOMEN EMPLOYED IN MILLINERY, BY YEARS IN THE TRADE, CURRENT PAYROLL, 1914

YEARS IN THE TRADE	Number report- ing weekly rate of wages	Median wage rate	NUMBER REPORTING ACTUAL EARNINGS ON CURRENT PAY- ROLL		MEDIAN EARNINGS	
			Week	Piece	Week	Piece
Less than 1 year.....	85	\$4.09	85	.....	\$3.91	.....
1 year and less than 2 years..	63	6.04	63	9	5.77	\$4.50
2 years and less than 3 years..	88	7.05	88	21	6.55	8.17
3 years and less than 5 years..	213	8.99	213	49	8.65	8.79
5 years and less than 7 years..	166	11.54	166	41	11.14	10.39
7 years and less than 10 years..	186	13.13	186	49	12.70	9.06
10 years and less than 15 years..	159	15.24	159	44	14.81	9.57
15 years and less than 20 years..	41	20.50	41	15	20.50	11.25
20 years and more.....	25	16.75	25	16	17.00	9.00
Total.....	1,026	\$10.82	1,026	244	\$10.33	\$9.21

For the group of week workers the median wage rate was \$10.82. A computation of the median in groups of equal experience in the trade shows a steady, although slow, progression from \$4.09 for week workers or "time" workers at work less than a year to \$20.50 for those whose experience was between 15 and 20 years. The table shows that the actual earnings were lower than the wage rates in the greater number of groups. The range of earnings of piece workers was not so wide as for time workers. Between the group with five to seven years of experience and those with fifteen to twenty the difference in earning capacity was slight, while in the intermediate groups the median wages were slightly less than for either of these. For the whole group the median earnings of time workers were \$10.33 and of piece workers \$9.21.

Statistics of wages according to age give us much the same kind of information, but the figures are not identical. A woman of twenty years' experience may have begun work at fourteen or at twenty, or a woman who has been a milliner three years may be seventeen or thirty-five. A given wage has a different meaning for the girl of seventeen and the woman of thirty-five or forty. Tables 9 and 10 show rates and earnings by ages.

* For explanation of the method of computing the median, see footnote, page 383.

FABLE 9.— WEEKLY RATES OF WAGES OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY AGES, CURRENT PAYROLL, 1914

WEEKLY RATES OF WAGES	WOMEN WHO WERE									All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years and more	
Less than \$2.....	.....	2	2	.....	.....	.....	.....	.....	.....	4
\$2.00 and less than \$2.50.....	1	6	2	.....	.....	.....	.....	.....	.....	9
\$2.50 and less than \$3.00.....	1	3	3	.....	.....	.....	.....	.....	.....	7
\$3.00 and less than \$3.50.....	4	15	3	.....	.....	.....	.....	.....	.....	22
\$3.50 and less than \$4.00.....	.....	4	2	1	.....	.....	.....	.....	.....	7
\$4.00 and less than \$4.50.....	7	14	4	1	.....	.....	.....	.....	.....	26
\$4.50 and less than \$5.00.....	.....	4	2	.....	.....	.....	.....	.....	.....	6
\$5.00 and less than \$5.50.....	3	15	14	3	.....	.....	.....	.....	.....	35
\$5.50 and less than \$6.00.....	.....	4	5	.....	.....	.....	.....	.....	.....	9
\$6.00 and less than \$6.50.....	.....	26	19	4	.....	.....	.....	.....	.....	49
\$6.50 and less than \$7.00.....	.....	2	2	.....	.....	.....	.....	.....	.....	4
\$7.00 and less than \$7.50.....	.....	17	40	13	2	.....	2	1	.....	75
\$7.50 and less than \$8.00.....	.....	2	4	1	.....	.....	.....	.....	.....	7
\$8.00 and less than \$9.00.....	.....	13	55	24	8	2	.....	.....	.....	102
\$9.00 and less than \$10.00.....	.....	4	48	22	4	1	1	.....	.....	80
\$10.00 and less than \$11.00.....	.....	.....	38	34	8	6	2	.....	.....	88
\$11.00 and less than \$12.00.....	.....	2	14	19	5	2	3	.....	.....	45
\$12.00 and less than \$13.00.....	.....	.....	18	62	35	6	1	2	2	126
\$13.00 and less than \$14.00.....	.....	.....	4	36	17	4	.....	1	.....	62
\$14.00 and less than \$15.00.....	.....	.....	5	28	28	5	2	1	1	70
\$15.00 and less than \$16.00.....	.....	.....	3	22	26	3	1	3	1	59
\$16.00 and less than \$18.00.....	.....	.....	.....	10	10	6	2	1	.....	29
\$18.00 and less than \$20.00.....	.....	.....	.....	3	8	2	3	1	.....	17
\$20.00 and less than \$25.00.....	.....	.....	.....	3	10	8	4	.....	1	26
\$25.00 and less than \$30.00.....	.....	.....	1	4	6	3	1	.....	.....	15
\$30.00 and less than \$35.00.....	.....	.....	.....	1	7	5	1	.....	1	15
\$35.00 and less than \$40.00.....	.....	.....	.....	1	2	6	1	.....	.....	10
\$40 or over.....	.....	.....	.....	2	4	8	6	1	2	23
Total.....	16	133	288	294	180	67	30	11	8	*1,027
Median wage.....	\$4.14	\$5.94	\$8.76	\$12.40	\$14.39	\$17.50	\$18.67	\$15.17	\$20.00	\$10.81

* Of the total, 1,363, for whom workers' reports were secured, 331 were piece workers, and 5 of the week workers did not state age.

TABLE 10.—ACTUAL EARNINGS DURING ONE WEEK OF WOMEN PIECE WORKERS AND WEEK WORKERS, EMPLOYED IN MILLINERY ESTABLISHMENTS, BY AGES, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN WHO WERE									All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more	
Less than \$2.....	1	4	5	2	1	1	.....	.....	.....	14
\$2 and less than \$3.....	3	15	10	4	.....	1	.....	1	.....	34
\$3 and less than \$4.....	4	20	7	4	3	.....	.....	.....	1	39
\$4 and less than \$5.....	6	14	9	4	4	2	2	.....	1	42
\$5 and less than \$6.....	2	20	32	16	7	2	1	1	1	83
\$6 and less than \$7.....	.....	33	30	7	6	.....	4	2	2	81
\$7 and less than \$8.....	.....	18	48	22	9	1	1	1	1	105
\$8 and less than \$9.....	.....	13	62	33	11	7	1	1	1	131
\$9 and less than \$10.....	.....	6	46	35	11	7	1	2	2	108
\$10 and less than \$11.....	.....	.....	45	45	14	3	.....	2	.....	112
\$11 and less than \$12.....	.....	2	19	29	20	2	1	1	.....	77
\$12 and less than \$13.....	.....	.....	18	58	29	11	4	2	2	125
\$13 and less than \$14.....	.....	.....	5	32	23	8	.....	.....	.....	68
\$14 and less than \$15.....	.....	.....	5	22	25	5	4	3	1	65
\$15 and less than \$16.....	.....	.....	3	20	19	3	1	2	1	49
\$16 and less than \$18.....	.....	.....	.....	10	11	5	3	1	.....	30
\$18 and less than \$20.....	.....	.....	.....	5	6	3	2	1	.....	17
\$20 and less than \$25.....	.....	.....	.....	3	10	9	4	.....	3	29
\$25 and less than \$30.....	.....	.....	2	4	6	4	1	.....	.....	17
\$30 and less than \$35.....	.....	.....	.....	1	7	5	1	.....	1	15
\$35 and less than \$40.....	.....	.....	.....	1	2	.....	7	2	.....	12
\$40 or over.....	.....	.....	.....	2	4	6	6	1	2	21
Total.....	16	145	346	359	228	85	50	26	19	*1,274
Median earnings.....	\$4.00	\$5.98	\$8.52	\$11.26	\$12.97	\$13.69	\$15.00	\$12.25	\$12.25	\$10.00

* Of the total 1,363, for whom workers' reports were secured, 7 did not state age and 82 were piece workers, whose earnings were not included as they had been employed only five days during the week on account of a legal holiday.

The mere grouping of the figures does show that the lower wages are paid the younger girls, but they show also that at least a few women reach the higher wage groups early; that is, between the ages of 21 and 25 numbers appear for the first time in the highest wage column. In Table 10, we discover that of 507 girls under 21, only 5 received actual earnings of \$15 or more. On the other hand, of the 180 women of thirty years or older, 106 received less than \$15 a week. It would appear that high wages in millinery are not attained by a large proportion of the workers and certainly not until after considerable experience. The medians show, however, steady increases with age, probably due primarily to increasing length of experience. The numbers in the highest age groups are too small to base conclusions upon them. That the prizes are chiefly reserved for those who have the ability to become designers or forewomen is shown in Tables 11 and 12, giving rates and earnings according to work done. The numbers treated here are identical with those for whom current payroll statistics were copied, since the facts about the occupation of each worker were secured from the employer and did not depend upon the workers' records.

According to Table 12 only 7 of the 72 designers received less than \$18 a week, while 28 of them earned \$40 or more, ranging as high as \$150. The table of median wage rates shows that apprentices and floor girls go considerably below the median for the whole group, and forewomen and designers rise above it, but that all the other groups of workers tend to somewhat the same wage level whether they be machine operators (not including straw hat makers) or hand sewers. It will be noted that the term "milliners" in this table is used to designate all who take part in trimming excepting designers and apprentices.

The characteristics of the workers, ages, nationality, and trade experience, deducible from their own statements on the cards discussed in previous tables will be described more fully after the other sets of wage statistics have been presented. One more table, however, drawn from the girls' own statements may well be discussed here. Table 13 shows earnings according to years of employment in the shops investigated.

TABLE 11.—RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY OCCUPATIONS,
CURRENT PAYROLL, 1914

WEEKLY RATE OF WAGES	WOMEN EMPLOYED AS								All women	
	Fore-women and assistants	Design-ers	Appren-tices	Other milliners	Floor workers	Machine opera-tors	Crimpers, cutters and wire frame makers	Flower and feather makers		Straw and crown sewers
Less than \$2.00	.....	.....	4	.....	.....	.....	.....	.....	.....	4
\$2.00 and less than \$2.50	.....	.....	11	..... 2	.....	.....	.....	.....	.....	13
\$2.50 and less than \$3.00	.....	.....	9	.....	.....	.....	.....	.....	.....	9
\$3.00 and less than \$3.50	.....	.....	25	..... 3	..... 1	.....	.....	.....	.....	29
\$3.50 and less than \$4.00	.....	.....	5	..... 3	.....	.....	.....	.....	.....	8
\$4.00 and less than \$4.50	.....	.....	19	..... 12	..... 4	.....	..... 1	..... 1	.....	37
\$4.50 and less than \$5.00	.....	.....	2	..... 3	..... 3	.....	.....	.....	.....	8
\$5.00 and less than \$5.50	.....	.....	17	..... 18	..... 9	.....	..... 7	..... 1	.....	52
\$5.50 and less than \$6.00	.....	.....	1	..... 9	..... 2	.....	.....	.....	.....	12
\$6.00 and less than \$6.50	.....	.....	2	..... 61	..... 9	..... 1	.....	.....	..... 1	75
\$6.50 and less than \$7.00	.....	.....	.....	..... 4	.....	.....	.....	.....	.....	4
\$7.00 and less than \$7.50	.....	.....	..... 1	..... 71	..... 11	..... 4	..... 1	..... 2	..... 1	91
\$7.50 and less than \$8.00	.....	.....	.....	..... 11	..... 2	.....	.....	..... 1	.....	14
\$8.00 and less than \$9.00	.....	.....	..... 1	..... 125	..... 6	..... 5	.....	.....	.....	137
\$9.00 and less than \$10.00	..... 2	.....	.....	..... 106	..... 7	..... 4	..... 3	..... 5	..... 1	128
\$10.00 and less than \$11.00	.....	.....	.....	..... 109	..... 6	..... 11	..... 4	..... 2	..... 1	133
\$11.00 and less than \$12.00	.....	.....	.....	..... 53	..... 1	..... 3	..... 3	..... 2	.....	64
\$12.00 and less than \$13.00	..... 2	.....	.....	..... 159	..... 9	..... 6	..... 2	.....	..... 1	179
\$13.00 and less than \$14.00	.....	.....	.....	..... 75	..... 2	..... 1	..... 2	.....	.....	80
\$14.00 and less than \$15.00	..... 2	.....	.....	..... 76	..... 2	..... 4	..... 1	.....	.....	85
\$15.00 and less than \$16.00	..... 1	..... 3	.....	..... 68	..... 1	..... 7	..... 2	.....	.....	84
\$16.00 and less than \$18.00	..... 2	.....	.....	..... 32	..... 1	.....	.....	..... 2	.....	38

TABLE II. -- RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY OCCUPATIONS,
CURRENT PAYROLL, 1914 -- Continued

WEEKLY RATE OF WAGES	WOMEN EMPLOYED AS									All women
	Fore-women and assist-ants	Design-ers	Appren-tices	Other milliners	Floor workers	Machine opera-tors	Crimpers, cutters and wire frame makers	Flower and feather makers	Straw and crown sewers	
\$18.00 and less than \$20.00.....	4	4	.....	15	.....	3	1	1	.....	28
\$20.00 and less than \$25.00.....	5	5	.....	19	2	.....	1	4	.....	36
\$25.00 and less than \$30.00.....	10	12	.....	8	1	1	.....	1	.....	33
\$30.00 and less than \$35.00.....	5	8	.....	4	.....	.....	1	1	.....	19
\$35.00 and less than \$40.00.....	2	9	.....	2	.....	.....	.....	.....	.....	13
\$40.00 or over.....	2	31	.....	.....	.....	.....	.....	1	.....	34
Total.....	39	72	97	1,048	79	50	30	27	5	*1,447
Median wage	\$24.50	\$37.22	\$3.49	\$10.88	\$7.63	\$11.00	\$10.50	\$11.75	\$9.50	\$10.77

* Of the total of 1,951 whose names appeared on the current payroll, 504 were piece workers whose rates of pay could not be ascertained. Of these, 22 were machine operators, 4 were crimpers, cutters and wire frame makers, 11 straw and crown sewers, and 467 milliners.

APPENDIX IV—WAGE INVESTIGATION

TABLE 12.—ACTUAL EARNINGS DURING ONE WEEK, OF WOMEN, PIECE AND WEEK WORKERS, EMPLOYED IN MILLINERY ESTABLISHMENTS, BY OCCUPATIONS, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED AS									All women
	Fore-women and assist-ants	Design-ers	Appren-tices	Other milliners	Floor workers	Machine opera-tors	Crimpers, cutters and wire frame makers	Flower and feather makers	Straw and crown sewers	
Less than \$2.00 .....	.....	.....	10	36	2	1	.....	.....	.....	49
\$2.00 and less than \$2.50 .....	.....	.....	16	21	.....	.....	.....	.....	1	38
\$2.50 and less than \$3.00 .....	.....	.....	7	14	2	.....	.....	.....	.....	23
\$3.00 and less than \$3.50 .....	.....	1	20	27	.....	.....	.....	.....	.....	48
\$3.50 and less than \$4.00 .....	.....	.....	7	15	.....	.....	.....	.....	.....	22
\$4.00 and less than \$4.50 .....	.....	.....	18	29	5	.....	1	1	3	57
\$4.50 and less than \$5.00 .....	.....	1	4	24	3	.....	.....	.....	.....	32
\$5.00 and less than \$5.50 .....	.....	.....	12	45	5	1	7	1	1	72
\$5.50 and less than \$6.00 .....	.....	.....	.....	42	2	.....	2	.....	.....	44
\$6.00 and less than \$6.50 .....	.....	1	2	66	10	2	.....	.....	2	85
\$6.50 and less than \$7.00 .....	.....	.....	.....	33	.....	.....	.....	.....	.....	33
\$7.00 and less than \$7.50 .....	.....	.....	.....	68	10	4	1	2	2	87
\$7.50 and less than \$8.00 .....	.....	.....	.....	55	2	.....	.....	1	.....	58
\$8.00 and less than \$9.00 .....	.....	.....	1	163	6	3	1	1	.....	175
\$9.00 and less than \$10.00	2	.....	.....	141	7	2	2	6	1	161
\$10.00 and less than \$11.00 .....	.....	.....	.....	130	6	13	4	.....	1	154
\$11.00 and less than \$12.00	2	.....	.....	106	2	3	3	2	.....	118
\$12.00 and less than \$13.00	2	.....	.....	144	8	6	1	.....	1	162
\$13.00 and less than \$14.00 .....	.....	1	.....	85	2	1	2	2	.....	93
\$14.00 and less than \$15.00	2	1	.....	63	2	5	1	.....	.....	74
\$15.00 and less than \$16.00	1	2	.....	58	1	7	2	1	.....	72
\$16.00 and less than \$18.00	2	.....	.....	40	1	.....	.....	3	2	48

TABLE 12.—ACTUAL EARNINGS DURING ONE WEEK, OF WOMEN, PIECE AND WEEK WORKERS, EMPLOYED IN MILLINERY ESTABLISHMENTS, BY OCCUPATIONS, CURRENT PAYROLL, 1914 — Continued

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED AS									All women
	Fore-women and assistants	Design-ers	Appren-tices	Other milliners	Floor workers	Machine opera-tors	Crimpers, cutters and wire frame makers	Flower and feather makers	Straw and crown sewers	
\$18.00 and less than \$20.00.....	4	4	.....	11	.....	3	1	1	.....	24
\$20.00 and less than \$25.00.....	5	8	.....	23	2	1	1	4	.....	44
\$25.00 and less than \$30.00.....	10	10	.....	9	1	2	.....	.....	1	33
\$30.00 and less than \$35.00.....	5	6	.....	4	.....	1	1	1	.....	18
\$35.00 and less than \$40.00.....	2	9	.....	2	.....	.....	.....	.....	1	14
\$40.00 or over.....	2	28	.....	.....	.....	.....	.....	1	.....	31
Total.....	39	72	97	1,454	79	55	30	27	16	*1,869
Median earnings.....	\$24.50	\$35.56	\$3.39	\$9.63	\$7.63	\$11.50	\$10.25	\$11.75	\$7.25	\$9.69

* Of the total 1,951 who were listed on the current payroll, 82 were piece workers whose earnings were not included as they had been employed only five days during the week on account of a legal holiday.

TABLE 13.—ACTUAL EARNINGS DURING ONE WEEK OF WOMEN PIECE AND WEEK WORKERS, EMPLOYED IN MILLINERY ESTABLISHMENTS, BY YEARS IN THE PRESENT ESTABLISHMENT, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED IN PRESENT ESTABLISHMENT													All women
	Less than 1 year	1 year and less than 2 years	2 years and less than 3 years	3 years and less than 4 years	4 years and less than 5 years	5 years and less than 6 years	6 years and less than 7 years	7 years and less than 8 years	8 years and less than 9 years	9 years and less than 10 years	10 years and less than 15 years	15 years and less than 20 years	20 years or more	
Less than \$2	11	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	14
\$2 and less than \$3	32	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	34
\$3 and less than \$4	23	12	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	39
\$4 and less than \$5	24	11	3	1	1	.....	.....	.....	.....	1	.....	.....	42
\$5 and less than \$6	42	13	23	1	.....	2	.....	1	.....	.....	.....	.....	83
\$6 and less than \$7	40	15	12	8	1	.....	.....	.....	.....	.....	.....	.....	81
\$7 and less than \$8	40	26	9	15	7	1	.....	1	.....	.....	.....	.....	105
\$8 and less than \$9	40	29	18	16	12	3	.....	1	.....	.....	.....	.....	131
\$9 and less than \$10	32	22	13	13	12	4	.....	.....	.....	.....	.....	.....	108
\$10 and less than \$11	31	21	10	10	18	5	.....	.....	.....	.....	.....	.....	113
\$11 and less than \$12	18	11	10	10	7	4	.....	.....	.....	.....	.....	.....	77
\$12 and less than \$13	36	19	13	9	15	4	.....	.....	.....	.....	.....	.....	125
\$13 and less than \$14	11	9	8	12	8	5	.....	.....	.....	.....	.....	.....	89
\$14 and less than \$15	7	2	6	11	7	4	.....	.....	.....	.....	.....	.....	65
\$15 and less than \$16	6	3	2	5	11	4	.....	.....	.....	.....	.....	.....	49
\$16 and less than \$18	4	5	1	4	4	2	.....	.....	.....	.....	.....	.....	32
\$18 and less than \$20	6	1	1	2	1	.....	.....	.....	.....	.....	.....	.....	16
\$20 and less than \$25	2	1	3	1	2	.....	.....	.....	.....	.....	.....	.....	30
\$25 and less than \$30	4	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	17
\$30 and less than \$35	5	2	2	1	.....	.....	.....	.....	.....	.....	.....	.....	15
\$35 and less than \$40	3	1	1	1	2	.....	.....	.....	.....	.....	.....	.....	12
\$40 or more	4	3	5	.....	1	.....	.....	.....	.....	.....	.....	.....	21
Total	421	209	143	123	112	61	45	34	32	18	65	11	4	*1,278
Median earnings	\$7 96	\$8 84	\$9 42	\$10 55	\$11 43	\$11 92	\$12 70	\$13 20	\$13 25	\$15 00	\$14 42	\$14 83	\$22 50	\$10 02

* Of the total, 1,363, for whom workers' reports were secured, 3 did not state years in the present establishment and 82 were piece workers whose earnings were not included as they had been employed only five days during the week on account

Of 1,278 workers in this group, as many as 421 had been in the shop less than a year. Table 8 has shown us that only 85 of these milliners had had less than a year's experience in the trade, so the large proportion who had been employed in their present work-place so short a time can be accounted for only by the assumption that for some reason the force in millinery shops is singularly lacking in stability. The number at work in the same shop five years or longer was 270, or 21 per cent. The increases in the medians according to duration of employment in one shop seem to indicate that it pays to continue with one firm as long as possible. A very few, it should be noted, had had a very long experience in one shop. That theirs were exceptional cases cannot be explained by the fact that the firms themselves were extraordinarily short-lived. It is true that one wholesale employer remarked that the average life of a retail shop was only five years, and that the wholesale trade also was characterized by an uncertainty as great as that of speculation in stocks. Nevertheless, although this may be true of the trade in general, our enforced selection of shops in which more or less satisfactory payroll data could be secured has tended apparently to the choice of more stable firms for investigation, as Table 14 shows.

TABLE 14.—YEARS IN BUSINESS OF MILLINERY ESTABLISHMENTS, AND MAXIMUM FORCE EMPLOYED DURING 1913

YEARS IN BUSINESS	Firms	Maximum force of women employed during 1913
Less than 1 year.....	2	40
1 year and less than 5 years.....	1	22
5 years and less than 10 years.....	19	616
10 years and less than 15 years.....	9	358
15 years and less than 20 years.....	7	383
20 years and less than 30 years.....	7	496
30 years and less than 40 years.....	1	57
40 years and less than 50 years.....	2	188
50 years or more.....	2	153
Total.....	*50	*2,313

Only two firms of those from whom current payroll statistics were secured had been in business less than a year, while 28 of the 50 reporting on this point had been in existence ten years or longer. These were

* Seven firms, employing a maximum force of 237 women, did not report number of years in business.

also the firms employing the majority of the workers, measuring them by the maximum force employed in the year. Several had been in business for many years. For instance, one establishment was founded nearly seventy years ago on Catherine Street, near Chatham Square. For a while, as it grew, it was located on Canal Street, then the fashionable shopping center. From there it was carried on the current of up-town moving to Twenty-third Street, and then to upper Fifth Avenue. Other firms, also, have been in business long enough to reflect the history of business location and business conditions in New York. In some instances employes in these old establishments could boast of long periods of service, extending even to forty years or more, but they were exceptional.

Length of Employment in Any One Establishment in the Calendar Year

Although the length of time the workers' names appeared on the payrolls in the calendar year relates properly to the subject of irregularity of employment to be discussed later, it is so important a factor in an understanding of the wage statistics drawn from the yearly payrolls, that it is presented here. Table 15 shows the facts.

TABLE 15.— WEEKS THAT WOMEN WERE ON THE ANNUAL PAYROLL, IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE, IN THE CALENDAR YEAR 1913

WEEKS	WOMEN ON PAYROLL THE SPECIFIED NUMBER OF WEEKS WHO WERE EMPLOYED IN			ALL WOMEN	
	Retail	Retail-wholesale	Wholesale	Number	Per cent
1.....	78	95	607	780	19.6
2.....	37	41	307	385	9.7
3.....	21	29	196	246	6.2
4.....	17	17	148	182	4.6
5.....	14	16	128	158	4.0
6.....	16	9	104	129	3.2
7.....	17	10	74	101	2.5
8.....	12	16	59	87	2.2
9.....	8	8	57	73	1.8
10.....	15	8	53	76	1.9
11.....	16	13	56	85	2.1
12.....	16	11	49	76	1.9
13.....	11	8	44	63	1.6
14.....	13	15	36	64	1.6
15.....	6	12	32	50	1.3
16.....	3	10	37	50	1.3
17.....	2	14	40	56	1.4
18.....	10	6	22	38	.9
19.....	6	8	35	49	1.2
20.....	2	5	22	29	.7
21.....	2	6	19	27	.7
22.....	1	4	29	34	.8
23.....	1	6	20	27	.7
24.....	2	6	22	30	.8
25.....	6	4	16	26	.6
26.....	3	4	28	35	.9
27.....	3	4	10	17	.4
28.....	5	6	15	26	.6
29.....	3	3	15	21	.5
30.....	4	3	22	29	.7
31.....	2	6	21	29	.7
32.....	3	6	8	17	.4
33.....	8	3	24	35	.9
34.....	6	7	6	19	.5
35.....	8	6	14	28	.7
36.....	3	16	17	36	.9
37.....	5	4	23	32	.8
38.....	7	8	15	30	.8
39.....	9	6	21	36	.9
40.....	6	9	25	40	1.0
41.....	5	11	20	36	.9
42.....	6	13	19	38	1.0
43.....	4	18	9	31	.8
44.....	7	12	21	40	1.0
45.....	8	15	17	40	1.0
46.....	14	18	20	52	1.3
47.....	13	9	20	42	1.1
48.....	2	22	27	51	1.3
49.....	6	22	37	65	1.6
50.....	7	20	43	70	1.8
51.....	15	8	34	57	1.4
52.....	8	5	97	110	2.8
Total.....	502	641	2,840	3,983	100.0

These figures and all which follow relating to the weeks of employment in any one shop in a year for these 3,983 women and the income received during these periods must be used cautiously. They do not show the length of time these milliners were employed in these shops, since many may have entered their positions in 1912 or earlier and doubtless others have continued in the same positions in 1914. Nor do they show the total employment of these girls in millinery in 1913, since many whose names appeared but a short time on the payrolls of the shops studied may have found work in other millinery establishments or in other occupations. They do show the number of times each worker appeared on the payroll in one shop in the calendar year 1913, and consequently they afford a measure of the amount of shifting and changing during those twelve months. Combined with the facts already quoted regarding the total length of employment in the trade and in one establishment of a representative group of milliners, and with the data to be outlined later showing weekly fluctuations in the force, this information deducible from a study of the annual payroll supplies additional evidence of irregularity of employment in millinery. Moreover, as will be shown later (Table 21, page 59), only 1,041 women were on the payrolls the first week in the calendar year, and only 906 in the last week, while of these, 110 whose employment was continuous for 52 weeks (Table 15) were of course counted both in the first and the last week, and should be eliminated from one of the groups, making a total of 1,837 whose work may have extended back into 1912 or forward into 1914. For the remaining 2,146 of the 3,983 studied, the period of employment could not have been continuous from 1912 or into 1914. Keeping in mind what the figures do not mean, in terms of total employment for the entire group, we may safely conclude that only in a markedly irregular trade would it be true that only 672 or 17 per cent of the 3,983 workers employed in these shops in the course of a year appeared on the payroll of any one shop forty weeks or longer in those twelve months, while 52 per cent were recorded eight weeks or less, and 780 or 20 per cent one week or less.*

Weekly Earnings While on Payroll

It is hardly necessary to emphasize again the fact that all the warnings given in the preceding paragraph apply with equal force to a discussion of the wage statistics copied for each worker during as many

*Appendix A, Table I, pages 435, 436, shows these facts for each establishment investigated.

weeks as her name appeared on the payroll in any one shop between January 1 and December 31, 1913. They do not show the total income of a worker in the year unless she happened to be employed 52 weeks in one position so that all her time was accounted for in one shop. They do not show even her loss in wages through unemployment. They do show the contents of the pay envelopes actually received by every employe in these shops in the course of a year and thus should be considered as additional evidence regarding weekly earnings. The statistics have been handled not by selecting any one week as typical, but by ascertaining the total earnings of each worker and then dividing by the number of weeks she was on the payroll of one shop in order to discover her average weekly receipts. If a girl was employed three months in the spring and three months in the autumn season with a period of two months between in which her name was dropped from the books, her total receipts for the two periods of work were divided by the number of weeks she was on the payroll rather than the number of weeks between the beginning of the spring season and the end of the autumn. Had the data been available to show whether or not she was at work elsewhere during those weeks of apparent idleness, then the distribution of her income over the longer period would have revealed the modification of weekly earnings through unemployment. Failing this, we were justified in assuming only that the data showed the average contents of the pay envelopes for individual workers rather than for the group, and for the entire year rather than for a selected week. Table 16 shows the distribution according to earnings thus averaged for the period of employment in any one shop.

TABLE 16.—AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913

AVERAGE WEEKLY EARNINGS	WOMEN WHOSE AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT WERE AS SPECIFIED	
	Number	Per cent
Less than \$2.....	81	2.5
\$2 and less than \$2.50.....	73	2.3
\$2.50 and less than \$3.....	80	2.5
\$3 and less than \$3.50.....	86	2.7
\$3.50 and less than \$4.....	82	2.6
\$4 and less than \$4.50.....	120	3.7
\$4.50 and less than \$5.....	124	3.9
\$5 and less than \$5.50.....	142	4.4
\$5.50 and less than \$6.....	142	4.4
\$6 and less than \$6.50.....	157	4.9
\$6.50 and less than \$7.....	162	5.0
\$7 and less than \$7.50.....	156	4.9
\$7.50 and less than \$8.....	128	4.0
\$8 and less than \$9.....	271	8.5
\$9 and less than \$10.....	293	9.1
\$10 and less than \$11.....	261	8.1
\$11 and less than \$12.....	221	6.9
\$12 and less than \$13.....	153	4.8
\$13 and less than \$14.....	95	3.0
\$14 and less than \$15.....	86	2.7
\$15 and less than \$16.....	45	1.4
\$16 and less than \$18.....	45	1.4
\$18 and less than \$20.....	53	1.7
\$20 and less than \$25.....	51	1.6
\$25 and less than \$30.....	26	.8
\$30 and less than \$35.....	20	.6
\$35 and less than \$40.....	18	.6
\$40 and less than \$50.....	11	.3
\$50 or over.....	21	.7
Total.....	*3,203	100.0

The median is between \$8 and \$9. The number earning less than \$5 was 646 or 20 per cent. The fact that the wage scale ranges up to \$50 or higher must not blind us to the significance of this fact — that one in five was receiving less than \$5 a week, and that more than half earned less than \$9. The proportion earning \$15 or more, including, it should be noted, all designers and forewomen, was only 290, or 9 per cent.† Table 17 shows the difference in different occupational groups.

* Of the 3,983 women who appeared on the annual payroll at any time during the year, 780 were on the payroll a week or less in the calendar year and were omitted from this table.
† Appendix A, Table II, pages 437, 439, shows the wage distribution in each shop.

TABLE 17.—AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913, BY OCCUPATIONS

AVERAGE WEEKLY EARNINGS	WOMEN EMPLOYED AS												
	Fore- women	De- signers	Trim- mers	Copy- ists	Makers	Pre- parers	Im- provers	Ap- pren- tices	Floor work- ers	Ma- chine opera- tors	Straw and crown sewers	Em- ploys in all other manu- factur- ing occu- pations	All women
Less than \$3.....	.....	.....	1	40	7	11	7	150	10	5	1	2	234
\$3 and less than \$4.....	.....	.....	.....	41	5	20	27	57	14	2	1	1	168
\$4 and less than \$5.....	.....	.....	1	73	11	65	32	27	15	6	3	11	244
\$5 and less than \$6.....	.....	.....	4	86	22	88	37	11	15	7	3	11	284
\$6 and less than \$7.....	.....	.....	7	119	42	105	24	1	8	5	4	4	319
\$7 and less than \$8.....	.....	1	4	116	48	65	8	1	9	19	6	7	284
\$8 and less than \$10.....	2	1	28	271	126	57	2	.....	15	33	9	20	564
\$10 and less than \$12.....	5	1	39	246	130	9	.....	.....	14	28	5	5	482
\$12 and less than \$15.....	7	5	25	119	125	4	.....	.....	11	19	9	10	334
\$15 and less than \$20.....	9	10	12	51	33	.....	.....	.....	6	5	9	8	143
\$20 and less than \$25.....	6	19	5	7	2	.....	.....	.....	1	1	7	3	51
\$25 and less than \$35.....	6	21	8	5	.....	.....	.....	.....	.....	1	3	2	46
\$35 and less than \$50.....	4	21	2	.....	.....	.....	.....	.....	.....	1	.....	1	29
\$50 or over.....	1	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	21
Total.....	40	99	136	1,174	551	424	137	247	118	132	60	85	*3,203
Median earnings.....	\$18.33	\$30.95	\$11.18	\$8.83	\$10.22	\$6.27	\$5.07	\$2.47	\$6.63	\$9.33	\$11.20	\$8.65	\$8.24

See footnote, Table 16, page 404.

The higher wage levels are reached only by designers and forewomen, and to some extent by trimmers. For the makers the median is \$10.22, for preparers \$6.27, for improvers \$5.07, and for apprentices \$2.47. The largest group, more than a third, were copyists, and the median earnings for them was \$8.83.*

Whether or not there is any relation between the weeks of employment in one shop in a year and the ability of the worker as measured by her earnings can best be shown by a study of the wage distribution according to duration of employment, as in Table 18.

TABLE 18.—AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT, OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK DURING THE CALENDAR YEAR 1913, BY NUMBER OF WEEKS ON THE PAYROLL DURING THIS PERIOD

AVERAGE WEEKLY EARNINGS	WOMEN EMPLOYED IN ONE ESTABLISHMENT IN THE CALENDAR YEAR 1913			All women
	Over 1 week and less than 10 weeks	10 weeks and less than 20 weeks	20 weeks or over	
Less than \$2.....	62	18	1	81
\$2 and less than \$2.50.....	52	14	7	73
\$2.50 and less than \$3.....	53	13	14	80
\$3 and less than \$3.50.....	57	7	22	86
\$3.50 and less than \$4.....	48	17	17	82
\$4 and less than \$4.50.....	82	18	20	120
\$4.50 and less than \$5.....	75	19	30	124
\$5 and less than \$5.50.....	93	24	25	142
\$5.50 and less than \$6.....	67	32	43	142
\$6 and less than \$6.50.....	89	29	39	157
\$6.50 and less than \$7.....	78	35	49	162
\$7 and less than \$7.50.....	68	26	62	156
\$7.50 and less than \$8.....	53	26	49	128
\$8 and less than \$9.....	117	45	109	271
\$9 and less than \$10.....	93	55	145	293
\$10 and less than \$11.....	82	59	120	261
\$11 and less than \$12.....	51	55	115	221
\$12 and less than \$13.....	41	19	93	153
\$13 and less than \$14.....	17	21	57	95
\$14 and less than \$15.....	15	17	54	86
\$15 and less than \$16.....	13	8	24	45
\$16 and less than \$18.....	11	12	22	45
\$18 and less than \$20.....	12	16	25	53
\$20 and less than \$25.....	18	8	25	51
\$25 and less than \$30.....	5	5	16	26
\$30 and less than \$35.....	2	5	13	20
\$35 and less than \$40.....	1	1	16	18
\$40 and less than \$50.....	2	3	6	11
\$50 or over.....	4	.....	17	21
Total.....	1,361	607	1,235	*3,203

*Appendix A, Table III, page 440, shows the weekly earnings averaged during the period of employment, by occupations and main branches of the trade.

† Of the 3,983 women who appeared on the annual payroll at any time during the year, 780 were on the payrolls a week or less and were omitted from this table.

As we have already explained, some of these jobs doubtless began previous to January 1, 1913, and some have lasted longer than December 31st, so that for a proportion of them the duration is not complete. In a thoroughly regularized industry, however, and one in which the force was stable, only so many jobs would terminate within the year as might represent a normal displacement of workers because of old age, death, retirement, or other natural causes. No data are available on which to base an estimate of what would constitute such a normal displacement but indirect evidence is to be found in the provision made by some trade unions that the number of apprentices shall never exceed the proportion of one to ten experienced workers. It is surely significant, then, that in millinery, of all the workers employed in this representative group of shops, 1,361 or 42 per cent appeared on the payrolls less than ten weeks between January 1st and the following December 31st, indicating numerous changes in the force of workers, while 1,235, or 39 per cent, were in the same shop 20 weeks or longer. The table shows a scattering through the entire range of wage-groups for those on the payroll less than ten weeks as for those at work twenty weeks or longer. Nevertheless, the proportion earning the lower wages was greater among those whose terms of employment in the period studied were brief. The median wage for those at work as long as a week but less than ten weeks was between \$6.50 and \$7, for those employed between ten and twenty weeks \$8 to \$9, and for those at work twenty weeks or longer \$9 to \$10.

Another way of viewing the figures is to consider the proportion in the different wage groups whose records on the payrolls were brief. We have noted that 42 per cent were on the payrolls less than ten weeks. Classified according to wages, however, the proportion was 66 per cent, or 429 of 646, for those getting less than \$5; 45 per cent, or 658 of 1,451, for those getting between \$5 and \$10; 25 per cent, or 206 of 816, for those getting between \$10 and \$15; and 23 per cent, or 68 of 290, for those receiving \$15 or more. Apparently employment was least regular for those whose wages were lowest, a fact of great importance in an effort to increase the earnings of the lowest-paid workers. The first explanation would seem to be that these are the inefficient who are worth neither high wages nor steady employment. Doubtless this is true in part, and both the industry and the community must devise plans for increasing efficiency. But another

TABLE 19.—TOTAL EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913, BY OCCUPATIONS

WOMEN EMPLOYED AS													
TOTAL EARNINGS	All women												
	Fore-women	De-signers	Trim-mers	Copy-ists	Makers	Pre-parers	Im-provers	Ap-pren-tices	Ma-chine-opera-tors	Straw and crown sewers	Floor work-ers	Em-plies in all other manu-factur-ing occu-pations	
Less than \$25.....	.....	1	23	273	79	118	25	139	15	7	20	8	708
\$25 and less than \$50.....	.....	10	20	156	70	86	24	41	21	4	13	9	454
\$50 and less than \$75.....	.....	2	12	75	38	41	18	22	10	4	10	11	243
\$75 and less than \$100.....	.....	5	6	65	34	39	11	19	10	3	7	2	201
\$100 and less than \$150.....	2	7	12	82	45	39	21	15	11	4	9	9	256
\$150 and less than \$200.....	1	4	10	85	37	24	15	8	8	4	2	6	204
\$200 and less than \$250.....	1	4	6	70	20	24	11	2	5	4	7	1	155
\$250 and less than \$300.....	.....	2	3	56	24	27	7	.....	6	7	7	4	143
\$300 and less than \$350.....	2	4	2	58	30	6	5	.....	7	7	8	3	132
\$350 and less than \$400.....	.....	1	3	54	19	8	.....	1	2	4	5	6	103
\$400 and less than \$450.....	1	3	2	56	18	8	.....	.....	5	3	4	5	105
\$450 and less than \$500.....	1	1	6	50	31	3	.....	.....	5	1	9	5	112
\$500 and less than \$600.....	6	4	12	63	52	.....	.....	.....	16	3	9	1	166
\$600 and less than \$800.....	5	9	9	20	44	1	.....	.....	9	3	6	6	112
\$800 and less than \$1,000.....	7	2	2	6	9	.....	.....	.....	.....	.....	1	6	33
\$1,000 and less than \$1,200.....	4	3	1	3	1	.....	.....	.....	1	2	1	1	17
\$1,200 and less than \$1,500.....	3	7	4	1	.....	.....	.....	.....	1	.....	.....	1	17
\$1,500 and less than \$1,800.....	3	12	2	1	.....	.....	.....	.....	.....	.....	.....	.....	18
\$1,800 or over.....	4	18	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
Total.....	40	99	136	1,174	551	424	137	247	132	60	118	85	*3,203

* See footnote, Table 16, page 404.

explanation would shift the responsibility from the workers to the industry and ask why millinery shops take on so many low-paid workers for brief periods of work.

A short term of employment and low wages combine to reduce total receipts from a single establishment to a very low level. We have already explained that even the careful transcription of a payroll week by week for an entire year does not enable us to draw any conclusions as to the workers' yearly income. All that we can state with authority is the total amount received by each girl while at work in one shop, in the course of the year to which the inquiry was limited. Table 19 shows these facts.

The median was between \$75 and \$100, that is, half the workers received less than that amount as their total receipts from one place of employment in the twelve months for which we secured records. Only 387, or 12 per cent, received \$500 or more, while 708, or 22 per cent, received less than \$25. Even the designers were not uniformly fortunate in earning an adequate income in one position, in that year. Of 99 designers, 44 received less than \$500. This may have been due in part to the fact that some shops employ designers for a brief period only at the beginning of the season to prepare models which can then be adapted and modified by less expensive workers. A correlation of total earnings with length of time on the payroll classified by main branches of the trade is the subject of Table 20.

Perhaps the most significant figures in this table are those showing the total receipts of those who received pay twenty weeks or longer, a total group of 1,235. The median income for them was between \$300 and \$400, and only 381, or 31 per cent, received \$500 or more while in one shop. Apparently a living wage for the majority of milliners is secured, if at all, only by holding more than one position in a year.

Is this necessity for frequent changes to be charged to the inefficiency or restlessness of the workers, or is the trade itself unstable, fluctuating from season to season? The question can best be answered through a discussion of our third set of wage statistics, those showing the number of names on the payroll and the total wages paid each week in the year. Frequent changes in the personnel of the labor force would not mean necessarily great changes in the total workroom force, since, presumably, if the business itself were equally distributed throughout the year, new workers would be engaged to take the places of those who had

TABLE 20.—TOTAL EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913, AND NUMBER OF WEEKS ON THE PAY-ROLL, BY MAIN BRANCHES OF THE TRADE

TOTAL EARNINGS FOR PERIOD	WOMEN WHO WERE ON THE PAYROLL IN THE CALENDAR YEAR											
	Over 1 week but less than 10 weeks				10 weeks and less than 20 weeks				20 weeks or more			
	Retail	Whole-sale	All branches		Retail	Whole-sale	All branches		Retail	Whole-sale	All branches	
Less than \$25.....	153	543	696		11	1	12		.....	.....	.....
\$25 and less than \$50.....	70	334	404		30	18	48		.....	.....	2	
\$50 and less than \$100.....	51	167	218		51	144	195		.....	.....	31	
\$100 and less than \$200.....	10	26	36		75	192	267		.....	96	157	
\$200 and less than \$300.....	3	2	5		23	36	59		.....	162	234	
\$300 and less than \$400.....	.....	.....	.....		8	8	16		.....	154	219	
\$400 and less than \$500.....	.....	.....	.....		3	2	5		.....	150	211	
\$500 and less than \$600.....	1	.....	1		1	1	2		.....	96	163	
\$600 and less than \$800.....	.....	.....	.....		1	2	3		.....	50	109	
\$800 and less than \$1,000.....	.....	.....	.....		.....	.....	.....		.....	14	33	
\$1,000 and less than \$1,200..	.....	.....	.....		.....	.....	.....		.....	8	17	
\$1,200 and less than \$1,500..	.....	.....	.....		.....	.....	.....		.....	6	17	
\$1,500 and less than \$1,800..	.....	.....	.....		.....	.....	.....		.....	8	18	
\$1,800 or over.....	.....	.....	.....		.....	.....	.....		.....	3	24	
Total.....	288	1,073	1,361	203	404	607		479	756	1,235		*3,203

* See footnote, Table 16, page 404.

left and the payroll would not vary greatly from week to week. In gathering this material, we have limited it to women and girls employed in the actual millinery work, instead of using the total for the establishment as a whole including the clerical force and workers in other departments of the business. Thus, instead of using the totals as recorded by the employers in the wage books, we have counted separately all the milliners whose names we found on the payrolls and added together their earnings. It is, therefore, a true record of the millinery workroom without the complicating factors introduced by the inclusion of employes in other departments. The facts are presented separately for each branch of the trade and for the three branches combined. It should be noted that since the seasons differ in retail and wholesale, their fluctuations nullify each other to a certain extent when the three are combined. Table 21 shows the number of employes and the wages paid each week in shops in the three branches of the trade, wholesale, retail, and retail with some wholesale trade.

In wholesale shops the total force varied from 1,168 to 426, with the maximum force employed in the second week in February and the minimum in the last week in May. That is, the minimum force was but 36 per cent of the maximum. The total wages fluctuated from \$12,299 to \$3,612, or from 100 per cent to 29 per cent, seemingly indicating that even the workers who are employed in the dull season receive less pay. Diagram I pictures these facts graphically.* It reveals the fact, characteristic of the millinery industry, that two dull seasons occur in the course of a year, thus forcing large numbers of employes to look for other positions, which obviously must be found in some other trade or at least in another branch of the millinery trade. It is true that some milliners succeed in lengthening their season by working first in wholesale and then in retail shops. A comparison of the fluctuations in employment in wholesale and retail shops shows that the peak of employment in wholesale does precede the maximum in retail. In the retail establishments investigated the maximum force, 255, was employed in the second week of April and the minimum, 63, or 25 per cent of the maximum, in the last week of July. We have already noted that in the wholesale establishments the week of maximum employment occurred in February and the minimum in May. That the retail shops which have also some wholesale trade have a somewhat

*Appendix A, Table V, page 443, and Diagrams II and III, pages 444, 445, show the facts separately for week workers and piece workers in wholesale shops.

**MILLINERY
NEW YORK CITY
PLATE I.**

**VARIATION IN THE PROPORTION OF WOMEN EMPLOYED, WEEK
BY WEEK, IN THE CALENDAR YEAR 1913, IN THE MAIN BRANCHES
OF THE TRADE.**

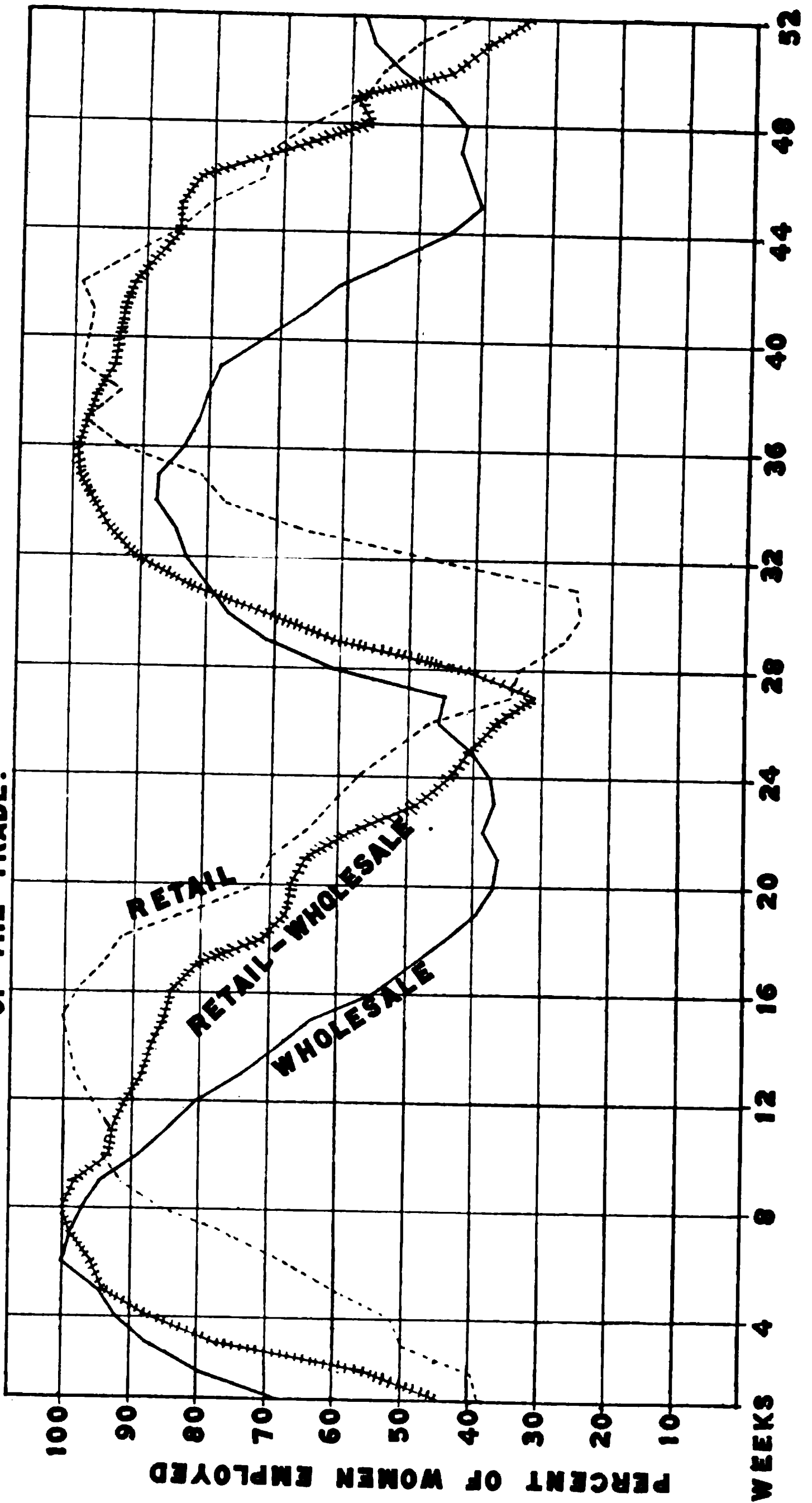


TABLE 21.—NUMBER OF WOMEN EMPLOYED AND TOTAL WAGES PAID IN MILLINERY ESTABLISHMENTS BY MAIN BRANCHES OF THE TRADE, BY WEEKS, FOR THE YEAR 1913

NUMBER OF WEEK	RETAIL		RETAIL — WHOLE- SALE		WHOLESALE		Total women employed
	Women employed	Total wages	Women employed	Total wages	Women employed	Total wages	
1.....	98	\$1,002	157	\$2,153	786	\$6,545	1,041
2.....	100	1,119	196	2,748	932	9,090	1,228
3.....	127	1,346	276	3,593	1,016	10,508	1,419
4.....	131	1,504	311	4,158	1,074	11,255	1,516
5.....	152	1,759	336	4,576	1,103	11,446	1,591
6.....	170	1,914	342	4,852	1,168	11,989	1,680
7.....	192	2,096	353	5,092	1,155	12,153	1,700
8.....	216	2,311	358	5,048	1,138	12,161	1,712
9.....	233	2,449	351	5,098	1,102	12,299	1,686
10.....	240	2,643	334	4,812	1,038	11,893	1,612
11.....	237	2,676	332	4,856	991	11,141	1,560
12.....	244	2,753	326	4,675	939	10,095	1,509
13.....	250	2,793	316	4,654	865	8,775	1,431
14.....	252	2,877	313	4,560	804	7,963	1,369
15.....	255	2,860	306	4,483	747	6,885	1,308
16.....	250	2,804	301	4,454	639	5,595	1,190
17.....	241	2,720	289	4,314	583	4,920	1,113
18.....	234	2,642	254	3,900	518	4,345	1,006
19.....	208	2,406	242	3,803	459	3,880	909
20.....	188	2,174	239	3,739	435	3,822	862
21.....	178	2,087	232	3,651	426	3,786	836
22.....	164	1,981	208	3,285	451	3,641	823
23.....	156	1,859	174	2,915	432	3,612	762
24.....	148	1,675	157	2,408	437	3,822	742
25.....	135	1,537	146	2,366	470	4,255	751
26.....	119	1,304	132	2,039	533	4,762	784
27.....	89	809	112	1,826	520	4,111	721
28.....	86	815	148	2,311	720	6,524	954
29.....	70	704	215	3,084	831	8,062	1,116
30.....	63	602	255	3,834	897	8,775	1,215
31.....	64	695	294	4,412	935	9,464	1,293
32.....	116	1,352	323	4,734	972	9,906	1,411
33.....	168	1,816	337	4,880	989	10,523	1,494
34.....	197	2,172	346	5,000	1,025	11,074	1,568
35.....	207	2,335	354	5,052	1,021	11,387	1,582
36.....	238	2,638	355	5,046	979	10,978	1,572
37.....	250	2,872	350	5,072	957	11,859	1,557
38.....	239	2,805	345	5,080	939	11,736	1,523
39.....	251	2,896	336	4,927	916	11,404	1,503
40.....	250	2,938	335	4,765	841	8,115	1,426
41.....	248	2,890	332	4,755	780	7,957	1,360
42.....	252	2,931	328	4,862	723	7,026	1,303
43.....	235	2,810	315	4,696	627	5,780	1,177
44.....	217	2,633	304	4,613	531	4,777	1,052
45.....	206	2,440	304	4,578	474	4,547	984
46.....	189	2,376	293	4,459	494	4,832	976
47.....	183	2,321	249	3,962	511	4,940	943
48.....	170	2,149	206	3,493	500	4,371	876
49.....	150	1,925	211	3,397	540	5,215	901
50.....	141	1,840	163	2,772	614	5,974	918
51.....	133	1,750	144	2,337	663	6,458	940
52.....	109	1,315	120	2,045	677	5,701	906
Average per week.....	181	\$2,079	270	\$4,004	768	\$7,733	1,219

longer season is also evident from the diagram. Even in these work-rooms, however, a large part of the force is laid off twice in the year. As Table 21 shows, the number employed varied from a maximum of 358 to a minimum of 112, or 33 per cent of the maximum, and the wages from \$5,098 to \$1,826, or 36 per cent of the maximum. Table 22 gives a summary of the facts regarding maximum, minimum, and average force, and total wages, as revealed in Table 21 and the accompanying diagram.

TABLE 22.—MAXIMUM AND MINIMUM NUMBER OF WOMEN EMPLOYED IN ANY ONE WEEK, AND AVERAGE NUMBER OF WOMEN EMPLOYED AND MAXIMUM AND MINIMUM AMOUNT OF WAGES PAID IN ANY ONE WEEK, AND AVERAGE AMOUNT OF WAGES PAID, DURING THE CALENDAR YEAR 1913, IN THE MAIN BRANCHES OF THE TRADE, IN 40 MILLINERY ESTABLISHMENTS

MAIN BRANCHES OF THE TRADE	NUMBER OF WOMEN EMPLOYED			Per cent aver- age is of maxi- mum	TOTAL WAGES PAID			Per cent aver- age is of maxi- mum
	Maxi- mum in any one week	Mini- mum in any one week	Aver- age during the year		Maxi- mum in any one week	Mini- mum in any one week	Aver- age during the year	
Retail.....	255	63	181	71	\$2,938	\$602	\$2,079	71
Retail-wholesale...	358	112	270	75	5,098	1,826	4,004	79
Wholesale.....	1,168	426	768	66	12,299	3,612	7,733	63

Besides the facts already discussed the table shows that the average number of employes was but 71 per cent of the maximum in retail, 75 per cent in retail-wholesale, and 66 per cent in wholesale. The corresponding percentage in total wages paid was 71 per cent in retail, 79 per cent in retail-wholesale, and 63 per cent in wholesale.

Although the seasons in wholesale and retail are not identical but rather supplement each other more or less, it is not possible for any large number of milliners to have 52 weeks of work even by passing from one branch of the trade to another. Table 23 shows that the periods of maximum employment for the majority of the shops tend to concentrate in the same quarters of the year, regardless of the branch of the trade to which they belong.

Seventeen firms employed their maximum force in January, February, or March. Of course they had another busy season in the autumn, but for these firms the spring was the time of greatest activity in 1913. In eighteen firms business reached its height in July, August, or Sep-

TABLE 23.—TIME OF YEAR WHEN THE MAXIMUM FORCE OF WOMEN WAS EMPLOYED IN EACH ESTABLISHMENT, BY MAIN BRANCHES OF THE TRADE, 1913

BRANCH OF THE TRADE	ESTABLISHMENTS IN WHICH THE MAXIMUM FORCE OF WOMEN WAS EMPLOYED IN				All estab-lishments
	First quarter	Second quarter	Third quarter	Fourth quarter	
Retail.....	2	2	5	3	12
Retail-wholesale.....	3	.....	4	.....	7
Wholesale.....	12	.....	9	.....	21
Total.....	17	2	18	3	40

tember. Only two retail firms employed their maximum force in the second quarter (April, May, or June) and three, also having a retail trade, in the fourth quarter (October, November, or December).

These facts indicate that at certain seasons of the year it would be impossible for wholesale workers to find positions in retail shops, or vice versa. Table 21 gives further evidence on this point by showing the total number employed, week by week, in all the shops investigated in all three branches of the trade. The maximum force was employed in the eighth week of the year. In the twenty-seventh week the number employed was but 42 per cent of the maximum, so that presumably at that time 58 in every hundred milliners were out of work because no work was to be had in any branch of their trade. For the last eight weeks of the year the proportion employed never exceeded 57 per cent of the maximum reached in the spring, leaving at least 43 in every hundred apparently without any place in the workrooms.

Hitherto, our discussion has related to the week of maximum employment rather than to the duration of the seasons. As a matter of fact, both individual firm records and their combined totals show that the absolute maximum was not repeated more than one week, although the rise preceding it and the decline following it were very gradual. To determine the length of the season we have figured the number of weeks in which the force did not fall more than 10 per cent below the maximum, and also the number in which the decline was not more than 25 per cent below the maximum. Table 24 shows the facts.

The fact that in the retail shops there were only 25 weeks in the year when the force was not at least 25 per cent below the maximum, 31 weeks in retail-wholesale, and 21 in wholesale, is an appalling revela-

TABLE 24.—WEEKS OF EMPLOYMENT OF MAXIMUM FORCE OF WOMEN IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE, 1913

BRANCH OF THE TRADE	WEEKS IN WHICH NUMBER OF WOMEN, EMPLOYED IN EACH BRANCH OF THE TRADE, DID NOT FALL	
	10 per cent below maximum force employed in any one week	25 per cent below maximum force employed in any one week
Retail.....	18	25
Retail-wholesale.....	19	31
Wholesale.....	6	21
Total.....	11	25

tion of what the seasons mean in the millinery trade. Even so liberal a measure as we have applied, namely, the employment of a force not more than 25 per cent below the maximum, results in classifying the industry as one in which the two busy seasons combined last but half the year. Nor are the fluctuations in jobs limited to any one group of workers in the trade. Table 25 shows the number of weeks workers in different occupational divisions of the trade appeared on the payroll in the year for which records were secured.

As might be expected, the forewomen had the largest proportion, exactly 50 per cent, employed full time, that is, 50 to 52 weeks in the year. The forewomen are needed for the organization of the workroom from season to season, and it is profitable to have them at hand for occasional dull season orders. Of the 99 designers, only 14 were at work so long as 50 weeks. The majority of the trimmers, copyists, makers, preparers, improvers, learners, machine operators, and straw sewers (of whom a very few were included in our study) were on the payrolls less than 20 weeks in the 52 studied.*

Much drifting may be due to the workers' own restless desire to change. It is obvious, however, that the trade itself now demands many more workers at one season than at another, so that for much of the shifting the industry can be held responsible. So ruthless a method of engaging and discharging workers would seem to indicate an abundant labor supply. The personnel of the force, age, nationality, conjugal condition, and permanence in the trade, becomes, therefore, of great

*Appendix A, Table VI, page 446, shows the number of weeks on the payroll by occupations, classified by main branches of the trade.

TABLE 25.— WEEKS ON PAYROLL, IN ONE POSITION LASTING MORE THAN ONE WEEK DURING THE YEAR 1913, OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY OCCUPATIONS

OCCUPATION	WOMEN WHO APPEARED ON THE PAYROLL, DURING THE YEAR 1913, FOR							All women
	More than 1 week and less than 6	6 weeks and less than 10	10 weeks and less than 20	20 weeks and less than 30	30 weeks and less than 40	40 weeks and less than 50	50 weeks and not more than 52	
Forewomen.....	.....	2	2	3	2	11	20	40
Designers.....	25	9	13	8	10	20	14	99
Trimmers.....	45	21	24	7	6	25	8	136
Copyists.....	408	123	205	100	112	148	78	1,174
Makers.....	141	61	104	38	59	125	23	551
Preparers.....	150	71	91	35	42	24	11	424
Improvers.....	29	17	32	12	20	23	4	137
Apprentices.....	97	40	58	25	13	8	6	247
Machine operators.....	33	14	28	12	8	12	25	132
Stock and floor girls....	10	5	9	5	7	10	18	64
Errand girls.....	10	6	9	3	1	3	1	33
Flower & feather hands.	2	1	4	3	3	14	5	32
Straw sewers.....	6	5	11	2	.....	6	.....	30
Crown sewers.....	6	3	2	7	4	3	5	30
Crimpers.....	1	7	7	6	.....	.....	.....	21
Cutters.....	1	1	2	3	2	1	8	18
Packers.....	1	2	1	2	1	.....	5	12
Shoppers.....	.....	.....	1	.....	1	1	6	9
Liners.....	1	.....	1	.....	.....	1	.....	3
Frame makers.....	.....	.....	3	.....	.....	.....	.....	3
Hand blockers.....	1	1	.....	.....	.....	.....	.....	2
Total.....	967	389	607	271	291	435	237	*3,197

interest. These facts are all drawn from the record cards filled by the girls in the workrooms.

Ages of Milliners

The youth of the majority of wage-earning girls in manufacturing industries generally is one of the most noteworthy facts in industry. The census of 1910 shows that of 207,959 women and girls at work in all forms of manufacturing in New York City, 68,293 or 33 per cent were under twenty-one.† Of the dressmakers, whose trade closely resembles millinery, 21 per cent were under twenty-one years of age. Table 26 shows the ages of milliners investigated by us in different branches of the trade.

Of the whole group, 69 per cent were under twenty-five and 40 per

* Of the total, 3,983, who appeared on the payroll at any time during the year, occupations were not ascertained for 6, and 780 were employed a week or less and have been omitted.

† Thirteenth United States Census, 1910. Volume IV, Occupation Statistics, pp. 180, 574.

TABLE 26.—AGES OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE, CURRENT PAYROLL, 1914

Age	WOMEN WHO WERE EMPLOYED IN						All women	
	Retail		Retail-wholesale		Wholesale			
	Num-ber	Per cent	Num-ber	Per cent	Num-ber	Per cent	Num-ber	Per cent
14 years and less than 16	3	1.7	3	1.0	10	1.1	16	1.2
16 years and less than 18	25	13.8	29	10.2	93	10.4	147	10.8
18 years and less than 21	57	31.5	63	22.0	259	29.2	379	28.0
21 years and less than 25	48	26.5	82	28.7	257	29.0	387	28.6
25 years and less than 30	29	16.0	67	23.4	144	16.2	240	17.7
30 years and less than 35	13	7.2	28	9.8	52	5.9	93	6.9
35 years and less than 40	6	3.3	9	3.2	31	3.5	46	3.4
40 years and less than 45	.....	.....	3	1.0	23	2.6	26	1.9
45 years or more.....	.....	.....	2	.7	19	2.1	21	1.5
Total.....	181	100.0	286	100.0	888	100.0	*1,355	100.0

cent were under twenty-one as compared with 21 per cent in dress-making, and 33 per cent in manufacturing as a whole. It is surprising, however, that only 16, or 1.2 per cent, were under 16, or, at least, so reported themselves. Probably in the main the facts are reliable, however, as many of the largest firms do refuse now to take children under sixteen. They say that the eight hour law for children is too great an inconvenience. The proportion of women of forty-five or older was slightly larger than the proportion under sixteen. In every branch of the trade the median age was between twenty-one and twenty-five. The retail shops had the largest percentage under twenty-five,—74 per cent as compared with 62 per cent in retail-wholesale, and 70 per cent in wholesale. It is noteworthy that the proportion under eighteen is not large—only 12 per cent in the whole group. The groups which predominate to a marked degree in each branch of the industry are those between eighteen and twenty-one and between twenty-one and twenty-five.†

Years in Trade

The youth of the majority of the milliners would indicate a lack of permanence in the trade, which can be more fully revealed by Table 27, showing years in the trade by main branches of the industry.

* Of the total, 1,363, for whom personal records were secured, 8 did not state age.

† Appendix A, Table VII, page 448, shows the ages of workers in the different occupational groups.

TABLE 27.—YEARS OF EXPERIENCE IN THE TRADE, OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE

YEARS OF EXPERIENCE	WOMEN EMPLOYED IN			ALL WOMEN	
	Retail	Retail – wholesale	Wholesale	Number	Per cent
Less than 1 year	22	19	44	85	6.3
1 year and less than 2	14	15	54	83	6.1
2 years and less than 3	18	17	82	117	8.7
3 years and less than 4	19	23	102	144	10.7
4 years and less than 5	18	20	103	141	10.4
5 years and less than 6	18	24	84	126	9.3
6 years and less than 7	15	17	66	98	7.3
7 years and less than 8	9	26	59	94	7.0
8 years and less than 9	8	21	51	80	5.9
9 years and less than 10	7	18	48	73	5.4
10 years and less than 15	22	59	131	212	15.7
15 years and less than 20	9	20	28	57	4.2
20 years or more . . . . .	.....	8	33	41	3.0
Total	179	287	885	*1,351	100.0

Of the whole group of 1,351 who reported on this point, 52 per cent had worked in the trade less than six years. On the other hand, the range of experience was wide, and as many as 23 per cent had been employed in millinery ten years or longer. Table 28 shows the years in the trade classified according to present age.

Obviously, the experience of the younger girls must be limited, so that it is only the older group concerning whom the report as to years in the trade is instructive. Of the 239 between the ages of twenty-five and thirty, 138 or 58 per cent had worked in the trade ten years or longer,—that is for as long a period as one could expect, considering the length of time since they reached an age when wage-earning was possible. On the other hand, a small group, 19, had been milliners five years or less, evidently entering the trade comparatively late.† Of the 184 who were thirty or older, 90 or 49 per cent had been in the trade fifteen years or longer. In each of the older age groups, however, were found individuals whose experience in the trade was much more brief than their age alone might indicate. Parenthetically, it may be pointed out that this fact indicates the danger of any conclusions regarding length of experience from data on ages in different

* Of the total, 1,363, who supplied personal records, 12 did not state years of experience in millinery.

† See Appendix A, Table VII, page 448, showing that of 66 apprentices reporting ages, 17 were between 18 and 21, and 3 were 21 or older.

TABLE 28.—YEARS OF EXPERIENCE IN THE TRADE OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY PRESENT AGE

YEARS OF EXPERIENCE	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more
Less than 1 year.....	12	50	16	3	2	1	1	.....	85
1 year and less than 2.....	4	38	35	6	.....	.....	.....	.....	83
2 years and less than 3.....	.....	43	59	6	7	1	.....	.....	117
3 years and less than 4.....	.....	14	96	28	2	2	.....	2	144
4 years and less than 5.....	.....	1	103	33	2	1	.....	1	141
5 years and less than 6.....	.....	1	52	64	6	3	.....	.....	126
6 years and less than 7.....	.....	.....	17	64	11	2	3	1	98
7 years and less than 8.....	.....	.....	1	74	14	2	1	2	94
8 years and less than 9.....	.....	.....	.....	54	19	4	2	.....	80
9 years and less than 10.....	.....	.....	.....	31	38	2	2	.....	73
10 years and less than 15.....	.....	.....	.....	20	132	46	9	3	211
15 years and less than 20.....	.....	.....	.....	.....	6	25	14	6	56
20 years or more.....	.....	.....	.....	.....	.....	3	14	10	40
Total.....	16	147	379	383	239	92	46	25	*1,348

* Of the total, 1,363, who supplied personal records, 8 did not state age and 7 did not state years in the trade.

occupations, such as the census provides. Drift from occupation to occupation, and varying ages at entrance into an industry render it unsafe to assume from such data anything more than the obvious fact that in a given industry the age distribution can be determined by the reports of census enumerators. The varying ages at beginning work in millinery are shown in Table 29.

A word of caution should precede any discussion of this table. The child labor laws are now well known in New York and it is possible that some of those who reported their age at beginning work as fifteen or sixteen wished to be on the safe side, whereas actually they may have been younger. Nevertheless the table is presented as a record based on the workers' own statements. It shows that 3.5 per cent began work before they were fourteen, 16 per cent at fourteen, 26 per cent at fifteen and 29 per cent at sixteen. Thus, although the proportion beginning work before they were seventeen is large, 74 per cent, it is interesting that the remaining fourth began work as late as they did, 16 per cent having been eighteen years or older when they entered industry. The table does not show the age at entering millinery, except for those whose first work was in the millinery trade. The statistics are based on the answers to the question: How old were you when you began to work for wages?

Conjugal Condition

As might be expected because of the youth of the majority of the milliners, only a very small percentage are married. Of the 1,346 reporting on this point, 1,236 or 92 per cent were single, 73 or 5 per cent were married, and 37 or 3 per cent were widowed or divorced.

Nativity

General observation in retail shops leads one to believe that millinery is a trade which is largely in the hands of native-born girls and women. In wholesale shops, however, foreigners predominate, as Table 30 shows.

The proportion of foreigners is 24 per cent in retail shops, 18 per cent in retail-wholesale, and 53 per cent in wholesale. For the group as a whole the percentage of foreign-born is 41. Among the foreign-born the Russians predominate, and an overwhelming majority of them, 224 of 238, are in wholesale shops. The table and its footnote

TABLE 29.—AGE AT BEGINNING WORK, OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY PRESENT AGE

AGE AT BEGINNING WORK	WOMEN WHO WERE								ALL WOMEN		
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or over	Num-ber	Per cent
Less than 14 years.....	.....	2	9	15	12	6	2	.....	.....	46	3.5
14 years and less than 15.....	8	31	69	65	27	2	4	4	1	211	15.9
15 years and less than 16.....	8	59	125	84	44	11	4	2	5	342	25.7
16 years and less than 17.....	.....	47	119	118	70	21	11	2	2	390	29.3
17 years and less than 18.....	.....	4	35	46	29	11	4	1	.....	130	9.7
18 years and less than 19.....	.....	.....	8	27	29	7	7	2	2	82	6.1
19 years and less than 20.....	.....	.....	2	15	6	7	1	3	2	36	2.7
20 years and less than 21.....	.....	.....	2	8	13	14	4	1	3	45	3.4
21 years and less than 25.....	.....	.....	.....	4	6	6	2	1	.....	19	1.4
25 years and less than 30.....	.....	.....	.....	.....	3	5	3	4	2	17	1.3
30 years or more.....	.....	.....	.....	.....	.....	1	4	5	3	13	1.0
Total.....	16	143	369	382	239	91	46	25	20	*1,331	100.0

* Of the total, 1,363, women who supplied personal records, 8 did not state present age and 24 did not state age at beginning work.

TABLE 30.— NATIVITY OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY MAIN BRANCHES OF THE TRADE

COUNTRY OF BIRTH	WOMEN EMPLOYED IN			ALL WOMEN	
	Retail	Retail – wholesale	Wholesale	Number	Per cent
Native-born.....	138	236	417	791	58.6
Foreign-born.....	44	51	464	559	41.4
Russia.....	6	8	224	238	17.6
Austria-Hungary.....	.....	5	79	84	6.2
Italy.....	5	1	44	50	3.7
Germany.....	11	8	26	45	3.3
Roumania.....	2	2	34	38	2.8
England.....	4	6	16	26	1.9
France.....	5	9	10	24	1.8
Ireland.....	1	2	8	11	.8
Sweden.....	3	3	4	10	.8
Other countries*.....	7	7	19	33	2.5
Total.....	182	287	881	†1,350	100.0

* Includes Canada, Belgium, Argentine Republic, Australia, Bulgaria, Denmark, Holland, Norway, Palestine, Scotland, Spain, Switzerland, and the West Indies.

† Of the total, 1,363, women who supplied personal records, 13 did not state country of birth, although 6 of these indicated that they were foreign-born.

show twenty-one other nationalities, most of them represented, however, in very small numbers. Table 31 shows the division of the various occupations between native and foreign-born women.

TABLE 31.— NATIVITY OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS BY OCCUPATIONS

OCCUPATION	WOMEN WHO WERE		l women
	Native	Foreign-born	
Forewomen.....	24	7	31
Designers.....	25	19	44
Trimmers.....	25	33	58
Copyists.....	204	258	462
Makers.....	217	59	276
Preparers.....	76	99	175
Improvers.....	53	14	67
Apprentices.....	40	25	65
Machine operators.....	38	17	55
Straw and crown sewers.....	9	4	13
Floor workers.....	47	12	59
Workers in all other manufacturing occupations.....	33	18	51
Total.....	791	565	*1,356

* Of the total, 1,363, who supplied personal records, 7 did not state nativity.

As might be expected from the fact that the foreign-born predominate only in wholesale millinery, their occupations are largely those of the wholesale trade, especially the work of copyists. Of the 31 forewomen, only 7 were foreign-born, and of the 44 designers, 25 were native-born. A tabulation of earnings by nativity showed a median wage of \$9.94 for the foreign-born, \$10.08 for the native-born, and \$10.02 for the two groups combined. The differences are too slight to be significant. Or, perhaps, on the contrary, it is very significant that the foreign workers are not seriously underbidding the native in millinery shops.

Conditions of Work

Of the conditions of work surrounding milliners, workroom conditions, hours of labor, overtime, home work, holidays and half-holidays, fines for tardiness or for spoiled work, benefit organizations and the like, only a brief description can be given here. Of all these factors entering into the day's work, the hours of employment are the most important. Table 32 gives this information.

TABLE 32.—WEEKLY HOURS OF WORK IN MILLINERY ESTABLISHMENTS AND MAXIMUM NUMBER OF WOMEN EMPLOYED, DURING 1913

WEEKLY HOURS OF WORK	Establishments	MAXIMUM NUMBER OF WOMEN EMPLOYED	
		Number	Per cent
Less than 48 hours	2	93	3.7
48 hours and less than 49	2	31	1.2
49 hours and less than 50	2	85	3.3
50 hours and less than 51	2	135	5.3
51 hours and less than 52	22	906	35.5
52 hours and less than 53	3	57	2.2
53 hours and less than 54	8	433	17.0
54 hours	16	810	31.8
Total	57	2,550	100.0

Of the 57 firms investigated, only 6, employing 209 workers in their millinery workrooms in busy season, had a working week of less than fifty hours. The largest group, 22 firms, employing 906 millinery workers, were running on a schedule of fifty-one or fifty-one and a fraction but less than fifty-two hours. The group working normally

up to the exact limit the law allows, that is, fifty-four hours a week, numbered 16 firms with a force of 810 milliners.

The firms working less than fifty-four hours may legally increase the hours of employment in busy season, but for those whose normal schedule is up to the legal limit, any overtime constitutes a violation of the law. As to the extent of such violations of law in the millinery trade, it is difficult for anyone to speak with authority. Evidence is not easy to secure. The payroll, even, does not give conclusive evidence, since it does not show the hours of work of piece workers. Nevertheless, some instances of overtime appeared in the records of week workers' earnings. In one large retail shop the payroll showed overtime in four successive weeks in the spring, varying from one to three nights a week for different workers. The compensation for one night's work, usually until 9 p. m., was half a day's pay. As the normal working week in this shop was fifty-one hours, three nights of overtime of three hours each night brought the week up to sixty hours, or six hours more than the law allows. Generally the retail shops insisted that they had very little overtime, perhaps a half hour at a time to finish one hat, and that even in such cases only one or two girls would stay to do the work. Perhaps the worst offenders in the matter of hours are the small retail shops with a neighborhood trade, which reaches its maximum in the evening, especially Saturday night. Both saleswomen and milliners must stay late to catch every possible bit of custom. It is a common practice to keep the store open until ten o'clock or later Saturday night, and in busy season it is usually open until nine the other five nights. We found that these were considered the usual hours in such small shops, and no one thought of paying extra for evening work. Usually latitude was allowed in coming later in the morning. One employer in a neighborhood store said that on five days in the week his shop was generally run at a loss, and that he counted on the Saturday rush to make good this loss and to yield a profit. He deplores the increasing stringency of laws regulating hours of work and contends that it interferes seriously with the convenience of working-class shoppers.

Overtime is probably very frequent and often excessive among piece workers in wholesale shops, but as we have already explained, it does not appear on the payrolls. In some instances we were told by employers that it was the regular practice to work overtime on busy days

until half past eight at night, with a half hour for supper, or if the girls prefer to omit the time for supper, they could stop work at eight, making a ten and a half hour day. In other cases they worked until nine o'clock. In some wholesale shops, home work is a substitute for overtime, the girls taking home a bundle of work and returning it to the shop in the morning. The work may be the making of hats or of such trimmings as rosettes and bows. Other employers, however, whose work is of high grade, say that the danger of losing materials and of having the work badly done without supervision is so great as to make it impracticable to give out work in this way. Occasional instances of it, nevertheless, were discovered even in the most expensive shops.

Fines in millinery shops are a punitive measure to compel promptness. They are not universal, however. In one large retail establishment, for example, in which the workroom is very carefully organized and the supervising member of the firm a strict disciplinarian, no fine is ever exacted; if a girl is tardy she is reprimanded, and if it happens too often she is dismissed. This seems a much more reasonable procedure than the fining system, which seems too often like a scheme of petty taxation of pay envelopes for the benefit of the firm. In one wholesale establishment which a milliner had described to us as "a place where you never get your full salary," our investigators found it almost the universal rule to dock every worker for tardiness, so that the earnings were almost invariably a few cents, at least, below the wage rate.

Another form of deduction from wages is the custom of not paying for some of the legal holidays. The practice in this respect varies greatly from shop to shop, and each of them has a different list of holidays. Few close the workroom on all the legally appointed days. Some close on a certain number of them, but pay wages on a few and deduct the day's pay for the others. For piece workers a holiday is always a total loss, amounting usually to about a week in a year. In some establishments, no one connected with the workroom, except possibly the forewoman or the designer, escapes docking on these legal rest-days. In like manner, some firms deduct the pay for half days off on Saturdays in summer, while others give full wages during that time. The common answer to the question as to whether any of the milliners were given vacations with pay was that only the forewoman or, per-

haps, a designer was so fortunate. One exceptional firm gives two weeks' vacation with pay to the eight girls who are week workers, besides paying them on all the ten legal holidays of the year, but even in this shop the thirty copyists who are piece workers must forego their earnings if they take vacations, and in any case they lose their pay on holidays. To talk about vacations in the millinery trade, however, is almost ironical, since for the majority of the workers the chief difficulty is not continuous work without rest, but too long a period of idleness between positions. Nevertheless, enforced idleness without wages cannot be called a vacation.

Of workroom conditions no general statement can be made since conditions differ so greatly in different establishments. Perhaps the most serious conditions are found in the small stores on the street level with workrooms in the rear. Ventilation and light are both seriously inadequate. In one of these, for instance, the workroom windows looked out on a very narrow backyard flanked by a fifteen-story building. The milliners worked all day by electric lights. Some of the large Broadway lofts are equally lacking in provisions for light and air, or for comfort. In one no lockers were provided and the hats and coats hung on the walls of the workroom. In contrast, another firm had provided an attractive dressing room, with neat, white woodwork, and with all the other workroom conditions, toilet arrangements, lighting, ventilation, and space most carefully planned.

Perhaps because of diversity of conditions in different shops and because of the unstable character of the occupation, no organization exists to voice the common interests of any large group of the workers. A very small band of foreign-born girls in wholesale shops have called themselves a union for several years, but so far they cannot be said to have made any impression upon the industry. It is exceedingly difficult to organize a trade in which the majority of the workers are together but half the year, especially when even that half is divided into two quarters and between them the milliners are no longer milliners but workers in whatever other occupations they can find. Only one benefit association was found and that had been organized by the firm in an establishment in which millinery is but one of many departments. The employes pay dues of ten cents a week if they are senior members,

and five if they are juniors, and the benefits are \$6 a week for seniors and \$3 for juniors in case of sickness. A death benefit of \$50 for seniors and \$25 for juniors is also paid by the organization. Other employers, questioned about benefit associations, replied almost uniformly that with so long a slack season, during which the workers are scattered and dues could not be collected, it would be impossible to manage any such organization. This is a significant comment on the disorganized state of the industry.

Methods of Hiring Workers and Determining Wages

Since the workers have no organization through which to bargain with their employers, the question of how wages are determined resolves itself into a discussion of the terms on which each milliner, acting for herself alone, secures and keeps a position, and how her employer decides what her wages shall be. Signs at street entrances, and advertisements in newspapers are the two chief means of making known vacancies in the workroom. Former employes are notified by post card or sometimes by telephone when the season begins and they are needed. Through them, also, new workers are often secured. Some firms, whose reputation is a famous one in the trade, never advertise nor hang up signs, but depend entirely upon the personal application of milliners who come to them in search of positions, because of the great asset which employment in one of these high grade establishments is supposed to be in their careers.

The hiring is done in some shops by the forewoman and in others by a member of the firm. The usual practice in the wage bargain is to try a girl for two or three days or longer "to find out what she is worth." The method described in one shop is typical of several. A girl is engaged at the wage she specifies, and then after a few days' trial, if she has not impressed the forewoman as being worth what she asks, she is offered a lower wage. If she refuses it, she loses her position but she is paid for the work she has done at the rate she has named. "They usually stay for what they are offered," said one employer.

That the labor contract is often merely a chance to work for an uncertain wage during an uncertain period is illustrated by the receipt which one firm has its employes sign on pay-day each week. "Re-

ceived from Blank and Company full settlement for salary and all claims to date. We also understand that no agreement or contract exists between Blank and Company and ourselves other than we are engaged by the week, but if we leave or are discharged, we are to be paid only for the actual time we have worked."

After the initial bargain is made, advancement depends quite as much upon chance as in the beginning. "If a girl asks for a raise, we give it to her if we have to," said one milliner in a prosperous establishment. It is the practice to keep track at each table of the time taken to make a hat as well as the cost of materials, but this is not a record of individual efficiency. That the experience of the employer or the casual observation of the forewoman is a sufficiently accurate method of determining wage rates, seems to be the common belief in the trade, but, after all, it is but the rule-of-thumb method which the efficiency engineers are trying to persuade manufacturers in other industries to abandon in favor of more scientific plans for keeping individual records. Of course, for piece workers, the earnings are determined by the number of hats they trim, but the same hit-or-miss method applies here in the fixing of rates per piece. In fact our questions about methods of determining rates of pay, and plans for promotion, usually puzzled the employers. Their most frequent reply was that it was impossible to standardize wages in millinery. It is probable that this was really a confession of failure to grapple with the problem.

As might be expected from this chaotic method of bargaining, the wage scales vary greatly from firm to firm even in the same branch of the trade. Table II in Appendix A (pages 81-83) showing the median wage for each firm, reveals the fact that the median is \$6.25 in one wholesale shop and \$12.50 in another, \$5 in one retail establishment and \$13.58 in another. This difference between different firms is one of the most important facts brought out in this as in other wage studies. It indicates the need for some method of determining fair standards of remuneration and enforcing them uniformly in the same trade in the same locality, exactly as hours of work and sanitary conditions can be standardized to the advantage of all firms, whose plane of competition is thus established.*

*See Appendix D, p. 468, for copy of award of wage board in millinery trade in Victoria.

Summary

The facts gathered in this investigation may be briefly summarized.*

In New York City, 13,000 women and 1,470 men were recorded by the census in 1910 as "milliners and millinery dealers," and 7,700 of the women and 1,020 of the men lived in Manhattan. These groups included many small milliners working alone without employes as well as the manufacturers of hats, so that the figures are an over-statement of the number employed in the trimming of hats,—the branch of the millinery industry to which our inquiry was restricted. Because of this restriction we found it possible further to limit our study to women, since practically no men are employed in trimming as distinct from the manufacture of hats. According to the industrial directory of the labor department, 8,885 women were at work in millinery shops in New York in 1912, and 7,933 of them worked in Manhattan. As an overwhelming majority of the large firms were in Manhattan we made our investigation there. We investigated 57 firms; employing in busy season a force of 2,550 women in their hat-trimming departments,—a force equal to 32 per cent of the milliners counted by the labor department in Manhattan shops, or 29 per cent of all the milliners at work in the city.

Millinery is a skilled industry, requiring training and experience lasting at least two seasons before one can pass beyond the apprentice stage. On the other hand, in certain types of establishment, methods of specialization have turned some of the work into factory processes, in which no opportunity is offered to learn to trim hats. The large

*As the facts presented in this report are based entirely on the study of payrolls and record cards filled out by milliners, no information is presented regarding the occupations in which milliners find work in slack season in their trade. Previous interviews with other workers in the trade give some indication on this point, however. They show that there is no one occupation to which large numbers of milliners habitually turn when they are laid off. Among a group of 200 girls studied, saleswork headed the list, but no other occupation stood out prominently. The milliners had been employed in clerical work, in cashier work, hand-sewing, neckwear manufacture, machine operating, trimming children's caps, trimming men's hats, sewing furs, making embroidery, cutting out lace, making feathers, lamp shades or straw ornaments, sewing ruchings on cards, pasting samples, tracing engravings, shaking out clothes in a laundry, packing candy, labeling, filling orders for patterns, bookbinding, examining, telephone operating, canvassing, and work as waitress or nurse-girl. In one shop in which the payrolls were studied in this investigation the employer makes a regular practice of recommending girls to three department stores for work as salesgirls in the Christmas season. For the most part, however, the girls must rely on their own efforts to find work through advertisements, through signs hung at doors of factories, or through the suggestions of friends.

majority of the workers, however, whose wages were transcribed from the payrolls were skilled workers, although their skill varied from the speed of the copyist in a Broadway wholesale shop to the artistic sense and deft touch of the trimmer of the most expensive product of the retail trade.

The study of current payrolls, including 1,951 workers, showed that the median wage rate for the week workers was \$10.77, but that it varied from \$9.91 in retail shops to \$10.51 in wholesale, and \$12.40 in retail shops with some wholesale trade. The actual earnings in the same week for the same group, with the piece workers added, were less than these wage rates. The median earnings for the whole group were \$9.69. Fifteen per cent earned \$15 or more, while 35 per cent earned less than \$8.

That experience counts in this trade, an indication that it is a skilled occupation, was shown by a computation of the median wages of groups of workers classified according to length of experience. The progression in earnings was steady, but slow, from \$3.91 for week workers at work less than a year to \$20.50 for those at work between fifteen and twenty years. For piece workers the range was from \$4.50 to \$11. The actual earnings averaged during the period of employment in one shop in one year were lower than the rates revealed in the statistics secured for one week, as already quoted. One in five earned less than \$5, and more than 50 per cent less than \$9. Only 9 per cent earned \$15 or more. Thus, in spite of the fact that the median wage in the millinery trade is more than \$9 a week, a rate higher than in many occupations for women, it is the 50 per cent or more earning less than that amount who must receive the attention of a wage commission.

All these facts relate, however, to the earnings in one week, without any allowance for the effect of short seasons on the worker's income. In the millinery trade it is the brief and uncertain tenure of employment in the course of the year which makes self-support difficult even for those whose rate of pay per week is not inadequate. We called all those weeks "busy" in which the force did not fall more than 25 per cent below the maximum, and yet even so liberal a measure made it possible to count but 25 busy weeks in retail shops, 31 in retail-wholesale, and 21 in wholesale, and these brief periods were divided into two seasons. In the dull months few workers were retained. In the

wholesale shops the minimum force was but 37 per cent of the maximum, in retail 25 per cent, and in retail-wholesale 32 per cent. In other words, from 60 to 75 of every hundred workers employed in busy season were superfluous in dull season. Forced to find other work twice in the year, milliners tend to change positions frequently in their own trade. Of 1,278 who reported the length of their employment, 421, or a third, had been in their present positions less than one year, yet only 85 had had less than a year's experience as milliners. Only 270, or 21 per cent, had worked five years or longer in one shop. All these figures are added evidence as to the irregularity of employment and, therefore, the irregularity of income for milliners in New York.

In an effort to insure a living wage for the workers, no problem is more important or more baffling than the one illustrated so vividly in the millinery industry, so to steady the seasons and lengthen the period of employment as to make the yearly income certain and adequate.

APPENDICES

[433]

APPENDIX A
Supplementary Statistics, New York Millinery Shops
TABLE I-A.—NUMBER OF WEEKS ON THE PAYROLL OF ANY ONE ESTABLISHMENT DURING THE CALENDAR YEAR 1913,
OF WOMEN EMPLOYED IN WHOLESALE MILLINERY

WOMEN WHO WERE ON THE PAYROLL THE SPECIFIED NUMBER OF WEEKS IN EACH WHOLESALE ESTABLISHMENT																						
NUMBER OF WEEKS	All establishments																					
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	
1 week or less.....	2	17	11	3	17	12	2	14	29	14	5	1	177	55	5	40	9	110	7	46	31	607
Over 1 week and less than 6	12	22	14	8	24	28	3	32	64	18	16	7	195	98	8	38	13	92	9	55	23	779
6 weeks and less than 10...	7	1	7	9	5	10	1	18	25	17	9	5	70	34	4	4	6	22	20	13	7	294
10 weeks and less than 14...	7	5	7	3	7	8	1	12	12	6	11	6	22	14	15	6	13	9	22	10	6	202
14 weeks and less than 18...	2	5	11	6	3	3	...	27	10	4	10	3	9	14	...	3	7	4	14	6	4	145
18 weeks and less than 22...	3	3	6	4	4	6	...	11	7	3	6	1	10	4	...	5	4	3	12	3	3	98
22 weeks and less than 26...	...	1	2	1	2	10	1	12	2	2	9	3	8	3	...	5	3	1	16	5	1	87
26 weeks and less than 30...	2	...	3	1	3	2	1	3	4	4	10	2	3	...	1	5	3	5	3	13	...	68
30 weeks and less than 34...	...	1	3	...	2	...	4	4	2	5	15	6	4	3	4	3	7	2	6	4	...	75
34 weeks and less than 38...	...	...	3	...	2	...	2	3	6	4	2	5	1	...	5	2	4	3	11	2	...	60
38 weeks and less than 42...	...	...	3	...	7	1	1	2	5	5	3	3	...	2	6	4	9	3	10	8	3	81
42 weeks and less than 46...	...	1	8	...	5	2	2	1	4	3	1	3	...	4	4	3	4	1	10	8	2	66
46 weeks and less than 50...	1	5	2	...	1	7	12	3	3	7	1	4	...	1	5	15	6	10	13	6	3	104
50 weeks and less than 52...	2	4	...	1	5	12	19	22	7	8	...	6	...	3	6	2	6	4	50	10	2	174
50 weeks and not over 52...	...	3	5	2	5	12	19	22	7	8	...	6	...	3	6	2	6	4	50	10	2	174
Total.....	38	68	82	38	87	103	49	164	180	100	98	55	502	235	63	135	94	269	203	189	88	2,840
Per cent on the payroll 26 weeks or more.....	13	21	29	10	29	25	84	23	17	36	33	53	2	6	49	25	42	10	51	27	15	22

* The Roman numerals used in column headings represent individual establishments

TABLE II-A.—AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913, BY INDIVIDUAL WHOLESALE SALE ESTABLISHMENTS

WOMEN WHOSE AVERAGE WEEKLY EARNINGS WERE AS SPECIFIED IN EACH WHOLESALE ESTABLISHMENT																		
AVERAGE WEEKLY EARNINGS	I	II	III	AI	A	IA	IIA	IIIA	XI	X	IX	IIIX	IIIX	ΔIX	ΔX	IAX	IIAX	IIIAIX
Less than \$2.....	.....	4	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	7	.....	8	.....	.....
\$2 and less than \$2.50.....	2	1	.....	.....	.....	1	.....	5	3	3	.....	10	.....	7	.....	.....	.....	1
\$2.50 and less than \$3.....	1	.....	1	1	.....	.....	.....	1	.....	.....	3	14	.....	5	.....	1	1	.....
\$3 and less than \$3.50.....	.....	.....	3	.....	1	3	.....	5	3	1	3	9	.....	9	1	3	1	1
\$3.50 and less than \$4.....	1	1	1	4	1	1	.....	2	2	.....	2	12	.....	2	.....	5	2	7
\$4 and less than \$4.50.....	2	1	.....	4	1	1	1	3	8	1	3	19	.....	18	1	2	3	5
\$4.50 and less than \$5.....	5	4	4	2	1	1	2	9	5	.....	2	22	1	11	1	2	2	6
\$5 and less than \$5.50.....	3	4	4	3	4	2	1	7	8	1	.....	23	.....	11	.....	5	3	8
\$5.50 and less than \$6.....	2	.....	5	2	1	1	3	5	15	1	6	19	.....	8	3	3	7	2
\$6 and less than \$6.50.....	4	1	5	3	1	3	3	4	15	1	5	24	.....	12	.....	4	3	1
\$6.50 and less than \$7.....	1	1	5	3	3	1	5	8	11	1	6	32	2	9	3	3	4	1
\$7 and less than \$7.50.....	2	4	4	.....	4	3	7	9	4	2	9	17	1	8	3	4	2	4
\$7.50 and less than \$8.....	5	4	3	2	6	3	3	8	2	4	4	14	.....	9	1	6	4	.....
\$8 and less than \$9.....	1	3	4	2	7	6	7	15	14	14	9	28	4	16	9	8	12	6
\$9 and less than \$10.....	4	3	4	2	8	6	4	11	15	13	12	18	7	9	8	14	18	2
\$10 and less than \$11.....	.....	4	10	2	11	2	2	18	20	16	7	16	10	10	8	13	12	6
\$11 and less than \$12.....	2	3	4	1	2	9	4	20	14	8	7	9	6	9	6	8	2	5
\$12 and less than \$13.....	.....	2	3	1	8	5	3	10	6	7	4	11	10	5	4	3	2	1

*The Roman numerals used in column headings represent individual establishments.

TABLE II-A.—(Continued)

WOMEN WHOSE AVERAGE WEEKLY EARNINGS WERE AS SPECIFIED IN EACH WHOLESALE ESTABLISHMENT																						
AVERAGE WEEKLY EARNINGS	#I	II	III	ΔI	Δ	IA	IIA	IIIA	XI	X	IX	IIX	IIIX	ΔIX	ΔX	IAX	IIAX	IIIAAX	XIX	XX	IXX	All establishments
\$13 and less than	1	2	4	2	1	5	.....	1	3	3	2	3	6	2	2	4	3	4	3	.....	1	52
\$14.....	2	2	.....	3	6	.....	2	1	2	3	1	4	4	3	.....	1	1	6	1	1	43
\$14 and less than	2	1	1	1	2	1	1	.....	2	1	1	6	2	.....	1	.....	3	2	1	1	29
\$15.....	2	.....	.....	1	8	1	.....	.....	1	2	1	3	3	.....	.....	.....	1	5	1	.....	29
\$15 and less than	1	.....	1	7	.....	2	.....	1	2	2	1	1	2	.....	.....	4	.....	1	1	26
\$16.....	2	.....	.....	.....	7	.....	2	.....	.....	1	2	2	1	1	1	2	1	2	.....	.....	24
\$16 and less than	1	.....	1	5	.....	.....	.....	1	.....	.....	1	.....	1	.....	.....	2	1	.....	1	16
\$18.....	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	8
\$18 and less than	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
\$20.....	8
\$20 and less than	8
\$25.....	8
\$25 and less than	8
\$30.....	8
\$30 and less than	8
\$35.....	8
\$35 and less than	8
\$40.....	8
\$40 or over.....	8
Total.....	36	51	71	35	70	91	47	150	151	86	93	54	325	180	58	95	85	159	196	143	57	2,233
Median earnings.	\$6.25	\$8.17	\$7.92	\$6.25	\$9.50	\$12.50	\$7.75	\$8.53	\$7.63	\$10.06	\$8.39	\$11.17	\$6.60	\$6.50	\$9.88	\$8.81	\$9.03	\$6.83	\$8.00	\$7.53	\$7.06	\$8.03

*The Roman numerals used in column headings represent individual establishments.

TABLE IIB.—AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913, BY INDIVIDUAL RETAIL AND RETAIL-WHOLESALE ESTABLISHMENTS

AVERAGE WEEKLY EARNINGS	WOMEN WHOSE AVERAGE WEEKLY EARNINGS WERE AS SPECIFIED IN EACH OF THE															
	Retail-wholesale establishments								Retail establishments							
	I	II	III	IV	A	IIA	IIIA	IV	I	II	III	IV	A	IIA	IIIA	IV
Less than \$2.	2	12	1	1	1	1	1	24	3	1	1	1	7	1	1	28
\$2 and less than \$3.	2	2	2	1	2	2	1	15	2	1	1	1	2	1	1	17
\$3 and less than \$4.	1	2	2	1	1	1	1	13	1	1	1	1	1	1	1	25
\$4 and less than \$5.	7	2	1	1	1	1	1	17	1	1	1	1	1	1	1	14
\$5 and less than \$6.	7	1	1	1	1	1	1	12	1	1	1	1	1	1	1	16
\$6 and less than \$7.	2	2	1	1	1	1	1	14	1	1	1	1	1	1	1	12
\$7 and less than \$8.	5	2	1	1	1	1	1	8	1	1	1	1	1	1	1	17
\$8 and less than \$9.	5	2	1	1	1	1	1	10	1	1	1	1	1	1	1	17
\$9 and less than \$10.	2	2	1	1	1	1	1	21	1	1	1	1	1	1	1	18
\$10 and less than \$11.	1	2	1	1	1	1	1	22	1	1	1	1	1	1	1	19
\$11 and less than \$12.	4	2	1	1	1	1	1	13	1	1	1	1	1	1	1	14
\$12 and less than \$13.	8	2	1	1	1	1	1	14	1	1	1	1	1	1	1	11
\$13 and less than \$14.	3	2	1	1	1	1	1	16	1	1	1	1	1	1	1	19
\$14 and less than \$15.	9	2	1	1	1	1	1	33	1	1	1	1	1	1	1	34
\$15 and less than \$16.	8	4	1	1	1	1	1	43	1	1	1	1	1	1	1	23
\$16 and less than \$17.	10	1	1	1	1	1	1	31	1	1	1	1	1	1	1	18
\$17 and less than \$18.	27	1	1	1	1	1	1	48	1	1	1	1	1	1	1	15
\$18 and less than \$19.	13	3	1	1	1	1	1	27	1	1	1	1	1	1	1	16
\$19 and less than \$20.	16	1	1	1	1	1	1	26	1	1	1	1	1	1	1	18
\$20 and less than \$21.	3	1	1	1	1	1	1	9	1	1	1	1	1	1	1	7
\$21 and less than \$22.	4	1	1	1	1	1	1	10	1	1	1	1	1	1	1	6
\$22 and less than \$23.	3	1	1	1	1	1	1	18	1	1	1	1	1	1	1	9
\$23 and less than \$24.	2	1	1	1	1	1	1	8	1	1	1	1	1	1	1	9
\$24 and less than \$25.	2	1	1	1	1	1	1	6	1	1	1	1	1	1	1	2
\$25 and less than \$26.	2	1	1	1	1	1	1	4	1	1	1	1	1	1	1	6
\$26 and less than \$27.	1	1	1	1	1	1	1	19	1	1	1	1	1	1	1	6
\$27 and less than \$28.	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5
Total.	157	48	68	113	83	41	36	546	25	26	32	82	72	15	28	424
Median earnings.	\$11.24	\$6.50	\$9.40	\$11.08	\$13.58	\$9.25	\$6.75	\$9.95	\$8.50	\$5.00	\$5.50	\$6.60	\$10.00	\$8.17	\$11.67	\$7.50

* The Roman numerals used in column headings represent individual establishments.

TABLE III.— AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT OF WOMEN EMPLOYED IN ANY ONE MILLINERY ESTABLISHMENT FOR MORE THAN ONE WEEK DURING THE CALENDAR YEAR 1913, BY OCCUPATIONS AND BY BRANCHES OF THE TRADE

OCCUPATION AND BRANCH OF THE TRADE	WOMEN WHOSE AVERAGE WEEKLY EARNINGS DURING EMPLOYMENT WERE AS SPECIFIED															All women
	Less than \$3	\$3 and less than \$4	\$4 and less than \$5	\$5 and less than \$6	\$6 and less than \$7	\$7 and less than \$8	\$8 and less than \$9	\$9 and less than \$10	\$10 and less than \$12	\$12 and less than \$15	\$15 and less than \$20	\$20 and less than \$30	\$30 and less than \$40	\$40 and less than \$50	\$50 or over	
Forewomen																
Retail.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	.....	.....	3
Retail-wholesale.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	4	2	1	1	10
Wholesale.....	.....	.....	.....	.....	.....	.....	2	.....	4	4	9	5	3	.....	.....	27
Total.....	.....	.....	.....	.....	.....	.....	2	.....	5	7	9	9	6	1	1	40
Designers																
Retail.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	5	8	4	1	21
Retail-wholesale.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	2	1	16	22
Wholesale.....	.....	.....	.....	.....	.....	1	.....	1	1	4	8	22	12	4	3	56
Total.....	.....	.....	.....	.....	.....	1	.....	1	1	5	10	30	22	9	20	99
Trimmers																
Retail.....	.....	.....	.....	.....	.....	.....	.....	.....	2	4	1	5	3	.....	.....	15
Retail-wholesale.....	.....	.....	.....	.....	3	.....	.....	.....	.....	1	1	5	2	.....	.....	12
Wholesale.....	1	.....	1	4	4	4	12	16	37	20	10	.....	.....	.....	.....	109
Total.....	1	.....	1	4	7	4	12	16	39	25	12	10	5	.....	.....	136
Copyists																
Retail.....	.....	.....	1	1	.....	1	2	6	10	2	9	.....	.....	.....	.....	32
Retail-wholesale.....	.....	.....	.....	.....	.....	.....	.....	.....	2	8	5	8	3	.....	.....	26
Wholesale.....	40	41	72	85	119	115	126	137	234	109	37	1	.....	.....	.....	1,116
Total.....	40	41	73	86	119	116	128	143	246	119	51	9	3	.....	.....	1,174
Makers																
Retail.....	1	1	5	4	14	13	10	22	40	29	10	.....	.....	.....	.....	149
Retail-wholesale.....	5	1	2	15	15	22	26	40	69	79	20	2	.....	.....	.....	296
Wholesale.....	1	3	4	3	13	13	15	13	21	17	3	.....	.....	.....	.....	106
Total.....	7	5	11	22	42	48	51	75	130	125	33	2	.....	.....	.....	551
Preparers																
Retail.....	.....	1	6	6	15	6	5	2	1	.....	.....	.....	.....	.....	.....	42
Retail-wholesale.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wholesale.....	11	19	59	82	90	59	31	19	8	4	.....	.....	.....	.....	.....	382
Total.....	11	20	65	88	105	65	36	21	9	4	.....	.....	.....	.....	.....	424

[illegible]

* See footnote Table 16, p. 404

TABLE IV. — AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT, OF WOMEN EMPLOYED IN ANY ONE ESTABLISHMENT FOR MORE THAN ONE WEEK IN THE CALENDAR YEAR 1913, BY MAIN BRANCHES OF THE TRADE

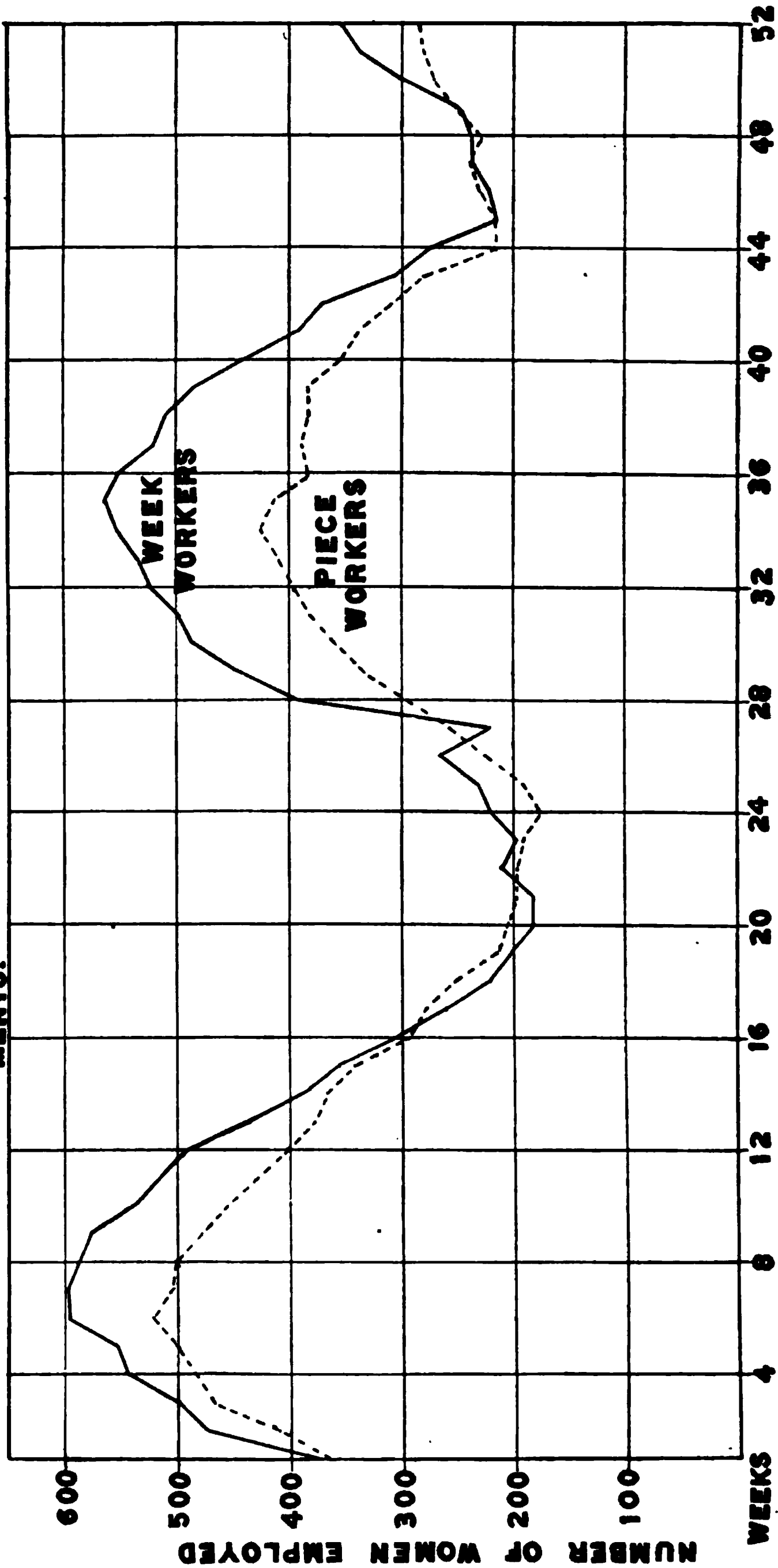
WOMEN WHOSE AVERAGE WEEKLY EARNINGS DURING PERIOD OF EMPLOYMENT WERE AS SPECIFIED																
BRANCH OF THE TRADE AND WEEKS ON PAYROLL	Less than \$3	\$3 and less than \$4	\$4 and less than \$5	\$5 and less than \$6	\$6 and less than \$7	\$7 and less than \$8	\$8 and less than \$9	\$9 and less than \$10	\$10 and less than \$12	\$12 and less than \$15	\$15 and less than \$20	\$20 and less than \$25	\$25 and less than \$30	\$30 and less than \$40	\$40 or over	All women
Retail																
Over 1 week but less than 10.....	38	13	13	14	11	6	6	13	15	9	1	2	.....	1	.....	142
10 weeks but less than 20.....	22	5	4	11	12	4	4	6	12	4	10	2	.....	2	.....	98
20 weeks or more.....	8	12	12	9	14	15	9	15	30	28	11	5	.....	9	5	184
Total.....	68	30	29	34	37	25	19	34	57	41	22	9	2	12	5	424
Retail-wholesale																
Over 1 week but less than 10.....	24	7	6	13	15	11	16	12	15	10	6	5	2	.....	4	146
10 weeks but less than 20.....	15	3	6	4	2	10	3	11	21	16	9	1	2	2	.....	105
20 weeks or more.....	13	19	10	14	18	9	14	20	43	74	22	12	4	8	15	295
Total.....	52	29	22	31	35	30	33	43	79	100	37	18	8	10	19	546
Wholesale																
Over 1 week but less than 10.....	105	85	138	133	141	104	95	68	103	54	29	11	3	2	2	1,073
10 weeks but less than 20.....	8	16	27	41	50	38	38	38	81	37	17	5	3	2	3	404
20 weeks or more.....	1	8	28	45	56	87	86	110	162	102	38	8	10	12	3	756
Total.....	114	109	193	219	247	229	219	216	346	193	84	24	16	16	8	2,233
Wholesale — Piecework																
Over 1 week but less than 10.....	41	38	61	65	58	52	35	28	33	19	7	2	1	.....	.....	440
10 weeks but less than 20.....	.....	2	1	10	18	13	12	15	27	19	12	2	.....	1	1	133
20 weeks or more.....	.....	1	5	13	32	43	48	57	81	51	12	3	1	.....	.....	347
Total.....	41	41	67	88	108	108	95	100	141	89	31	7	2	1	1	920
Wholesale — Week work																
Over 1 week but less than 10.....	64	47	77	68	83	52	60	40	70	35	22	9	2	2	2	633
10 weeks but less than 20.....	8	14	26	31	32	25	26	23	54	18	5	3	3	1	2	271
20 weeks or more.....	1	7	23	32	24	44	38	53	81	51	26	5	9	12	3	409
Total.....	73	68	126	131	139	121	124	116	206	104	53	17	14	15	7	1,313

TABLE V.—NUMBER OF WOMEN PIECE AND WEEK WORKERS EMPLOYED, EXCLUDING DESIGNERS AND FOREWOMEN, AND TOTAL WAGES PAID, IN WHOLESALE MILLINERY ESTABLISHMENTS, BY WEEKS IN THE YEAR 1913

NUMBER OF WEEK	NUMBER OF WOMEN EMPLOYED AT		All women	TOTAL WAGES PAID TO		
	Piece work	Week work		Women at piece work	Women at week work	All women
1.....	368	371	739	\$2,599	\$2,840	\$5,439
2.....	408	474	882	3,887	3,990	7,877
3.....	468	498	966	4,852	4,453	9,305
4.....	482	541	1,023	5,292	4,745	10,037
5.....	500	553	1,053	5,280	4,970	10,250
6.....	521	595	1,116	5,505	5,261	10,766
7.....	505	597	1,102	5,586	5,302	10,888
8.....	500	589	1,089	5,623	5,367	10,990
9.....	477	577	1,054	5,820	5,327	11,147
10.....	457	533	990	5,643	5,091	10,734
11.....	429	515	944	5,172	4,844	10,016
12.....	400	492	892	4,407	4,566	8,973
13.....	377	442	819	3,759	3,909	7,668
14.....	367	390	757	3,295	3,545	6,840
15.....	343	357	700	2,485	3,272	5,757
16.....	293	303	596	1,801	2,760	4,561
17.....	280	260	540	1,697	2,196	3,893
18.....	253	221	474	1,452	1,861	3,313
19.....	215	202	417	1,135	1,726	2,861
20.....	207	185	392	1,190	1,650	2,840
21.....	199	185	384	1,119	1,695	2,814
22.....	198	210	408	992	1,657	2,649
23.....	193	198	391	909	1,722	2,631
24.....	176	219	395	945	1,869	2,814
25.....	192	233	425	1,250	2,034	3,284
26.....	225	267	492	1,608	2,229	3,837
27.....	256	223	479	1,475	1,683	3,158
28.....	294	386	680	2,315	3,255	5,570
29.....	336	448	784	3,080	3,850	6,930
30.....	360	489	849	3,443	4,146	7,589
31.....	383	499	882	3,598	4,530	8,128
32.....	397	524	921	3,882	4,758	8,640
33.....	407	535	942	4,310	5,055	9,365
34.....	424	554	978	4,718	5,252	9,970
35.....	412	562	974	5,036	5,237	10,273
36.....	382	551	933	4,710	5,165	9,875
37.....	388	522	910	5,670	5,041	10,711
38.....	382	509	891	5,523	5,019	10,542
39.....	381	488	869	5,401	4,810	10,211
40.....	353	443	796	3,750	3,266	7,016
41.....	339	397	736	3,518	3,414	6,932
42.....	308	372	680	2,756	3,275	6,031
43.....	279	306	585	2,021	2,737	4,758
44.....	215	274	489	1,490	2,748	4,238
45.....	217	215	432	1,606	1,872	3,478
46.....	229	221	450	1,654	2,047	3,701
47.....	239	233	472	1,825	2,115	3,940
48.....	228	236	464	1,525	1,909	3,434
49.....	251	245	496	1,951	2,210	4,161
50.....	272	298	570	2,271	2,634	4,905
51.....	280	336	616	2,363	2,953	5,316
52.....	282	352	634	1,924	2,741	4,665
Average per week	333	389	722	3,175	3,473	6,648

**MILLINERY
NEW YORK CITY
PLATE II.**

**NUMBER OF WOMEN, PIECE AND WEEK WORKERS, EXCLUDING
DESIGNERS AND FOREWOMEN, EMPLOYED WEEK BY WEEK IN
THE CALENDAR YEAR 1913, IN 21 WHOLESALE ESTABLISH-
MENTS.**



MILLINERY
NEW YORK CITY
PLATE III.
TOTAL WAGES PAID WEEK BY WEEK, IN THE CALENDAR YEAR
1913, TO WOMEN PIECE AND WEEK WORKERS, EXCLUDING DESIGN-
ERS AND FOREWOMEN, EMPLOYED IN 21 WHOLESALE ESTABLISH-
MENTS.

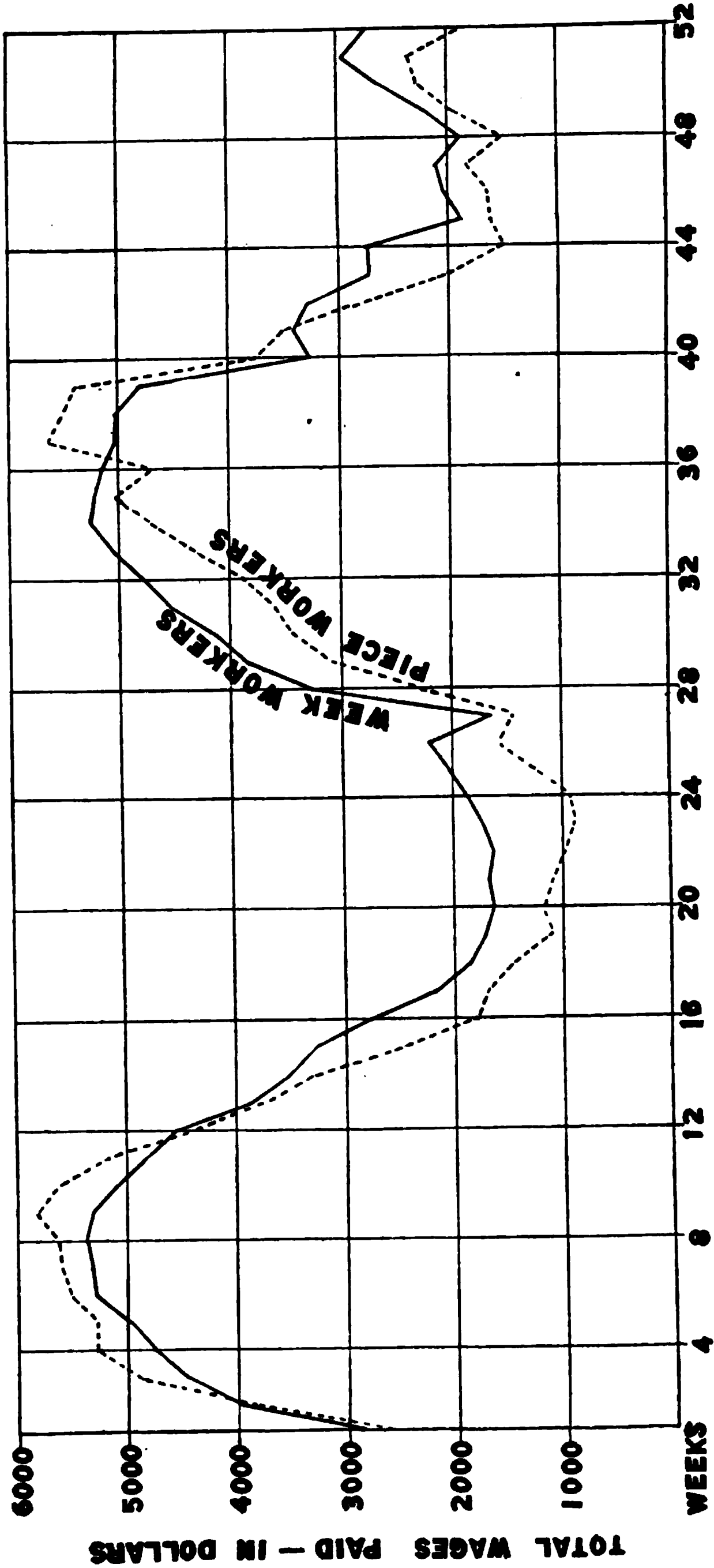


TABLE VI.—NUMBER OF WEEKS ON PAYROLL DURING 1913 OF WOMEN EMPLOYED IN MILLINERY ESTABLISHMENTS, BY OCCUPATIONS AND MAIN BRANCHES OF THE TRADE

OCCUPATION	WOMEN IN EACH OCCUPATION WHO WERE ON THE PAYROLL					All women
	Over 1 week and less than 6	6 weeks and less than 10	10 weeks and less than 20	20 weeks and less than 40	40 weeks or more	
Retail:						
Forewomen					3	3
Designers	4		3	6	8	21
Trimmers		3	3	4	5	15
Copyists	5	3	10	6	8	32
Makers	30	18	30	27	44	149
Preparers	10	2	7	15	8	42
Improvers	11	5	18	9	5	48
Apprentices	21	16	20	12	6	75
Floor workers	7	5	7	3	13	35
Workers in all other manufacturing occupations	1	1		1	1	4
Total	89	53	98	83	101	424
Retail-wholesale:						
Forewomen			1		9	10
Designers	4	3	1	5	9	22
Trimmers	3	3	1		5	12
Copyists	3	2	8	6	7	26
Makers	62	20	59	61	94	296
Improvers	9	4	9	16	21	59
Apprentices	13	7	19	17	5	61
Machine operators	1				1	2
Floor workers	5	3	4	4	14	30
Workers in all other manufacturing occupations	3	1	3	4	17	28
Total	103	43	105	113	182	546
Wholesale:						
Forewomen		2	1	5	19	27
Designers	17	6	9	7	17	56
Trimmers	42	15	20	9	23	109
Copyists	400	118	187	200	211	1,116
Makers	49	23	15	9	10	106
Preparers	140	69	84	62	27	382
Improvers	9	8	5	7	1	30
Apprentices	63	17	19	9	3	111
Machine operators	32	14	28	20	36	130
Straw and crown sewers	12	8	13	13	14	60
Floor workers	9	5	9	13	17	53
Workers in all other manufacturing occupations	6	9	14	13	11	53
Total	779	294	404	367	389	2,233

TABLE VI.—*Concluded*

OCCUPATION	WOMEN IN EACH OCCUPATION WHO WERE ON THE PAYROLL					All women
	Over 1 week and less than 6	6 weeks and less than 10	10 weeks and less than 20	20 weeks and less than 40	40 weeks or more	
All branches:						
Forewomen		2	2	5	31	40
Designers	25	9	13	18	34	99
Trimmers	45	21	24	13	33	136
Copyists	408	123	205	212	226	1,174
Makers	141	61	104	97	148	551
Preparers	150	71	91	77	35	424
Improvers	29	17	32	32	27	137
Apprentices	97	40	58	38	14	247
Machine operators	33	14	28	20	37	132
Straw and crown sewers	12	8	13	13	14	60
Floor workers	21	13	20	20	44	118
Workers in all other manu- facturing occupations	10	11	17	18	29	85
Total	971	390	607	563	672	*3,203

* See Table 16, footnote, p. 50.

TABLE VII.—OCCUPATIONS OF WOMEN EMPLOYED IN MILLINERY, BY AGES

Occupation	WOMEN WHO WERE									All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or over	
Forewomen.....	.....	.....	1	6	12	4	5	1	2	31
Designers.....	.....	.....	1	6	15	13	7	1	1	44
Apprentices.....	11	35	17	3	.....	.....	.....	.....	.....	66
All other milliners.....	1	81	309	325	192	64	31	23	16	1,042
Feather and flower makers.....	.....	2	4	3	2	3	.....	.....	.....	14
Machine operators.....	.....	7	13	17	10	7	.....	.....	1	55
Straw and crown sewers.....	.....	.....	5	1	2	2	2	1	.....	13
Crimpers, cutters and wire-frame makers.....	1	4	9	12	4	.....	.....	.....	1	31
Floor workers.....	3	18	20	14	3	.....	1	.....	.....	59
Total.....	16	147	379	387	240	93	46	26	21	*1,355

* Of the total, 1,363, women who supplied personal records, 8 did not state age.

APPENDIX B
Wages in Millinery Workrooms in New York City Department Stores

TABLE I.—WEEKLY RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY WORKROOMS IN 21 DEPARTMENT STORES IN NEW YORK CITY, BY YEARS IN THE TRADE, CURRENT PAYROLL, 1914

WEEKLY RATE OF WAGES	WOMEN EMPLOYED IN THE TRADE								All women
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20	20 years or over
Less than \$2.....	1	.....	.....	.....	.....	.....	.....	.....	1
\$2 and less than \$3.....	1	.....	.....	.....	.....	.....	.....	.....	1
\$3 and less than \$4.....	1	.....	1	.....	.....	.....	.....	.....	2
\$4 and less than \$5.....	6	3	.....	.....	.....	.....	.....	.....	9
\$5 and less than \$6.....	1	2	2	1	.....	.....	1	.....	7
\$6 and less than \$7.....	1	2	4	3	.....	.....	.....	.....	11
\$7 and less than \$8.....	1	1	1	.....	1	1	.....	.....	6
\$8 and less than \$9.....	.....	2	.....	8	2	2	.....	.....	15
\$9 and less than \$10.....	.....	.....	1	4	3	2	2	.....	10
\$10 and less than \$11.....	.....	.....	1	2	.....	5	2	1	16
\$11 and less than \$12.....	.....	.....	.....	.....	1	5	2	.....	8
\$12 and less than \$15.....	.....	.....	1	2	2	7	7	6	21
\$15 and less than \$20.....	.....	.....	1	.....	.....	2	5	.....	17
\$20 and less than \$25.....	.....	.....	.....	.....	1	.....	1	4	11
\$25 and less than \$30.....	.....	.....	.....	.....	1	.....	.....	1	6
\$30 or more.....	.....	1	.....	.....	.....	.....	.....	1	3
Total.....	12	11	12	20	14	24	27	12	*144
Per cent.....	8.3	7.7	8.3	13.9	9.7	16.7	18.8	8.3	100.0

*Of the total, 150, 6 did not state years in the trade.

TABLE II.—ACTUAL EARNINGS DURING ONE WEEK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY YEARS IN THE TRADE, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED IN THE TRADE								All women
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20	20 years or more
Less than \$2.....	2	.....	.....	.....	.....	.....	.....	.....	2
\$2 and less than \$3.....	.....	1	.....	.....	.....	.....	.....	.....	1
\$3 and less than \$4.....	3	2	1	.....	.....	.....	.....	.....	6
\$4 and less than \$5.....	4	1	.....	.....	.....	.....	.....	.....	5
\$5 and less than \$6.....	1	2	2	1	2	.....	2	.....	10
\$6 and less than \$7.....	1	1	4	4	.....	1	.....	.....	11
\$7 and less than \$8.....	1	1	1	2	2	1	.....	.....	8
\$8 and less than \$9.....	.....	2	.....	6	2	1	1	.....	12
\$9 and less than \$10.....	.....	.....	2	5	1	4	3	1	16
\$10 and less than \$12.....	.....	.....	.....	1	3	9	4	1	20
\$12 and less than \$15.....	.....	.....	1	1	2	6	4	.....	15
\$15 and less than \$20.....	.....	.....	.....	.....	.....	2	7	6	17
\$20 and less than \$25.....	.....	.....	1	.....	1	.....	5	1	14
\$25 and less than \$30.....	.....	.....	.....	.....	1	.....	1	3	5
\$30 or more.....	.....	1	.....	.....	.....	.....	.....	1	2
Total.....	12	11	12	20	14	24	27	12	*144

* Of the total, 150, 6 did not state years in the trade.

TABLE III.— WEEKLY RATES OF WAGES OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES
IN NEW YORK CITY, BY AGES, CURRENT PAYROLL, 1914

WEEKLY RATES OF WAGES	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years and over
Less than \$2.....	1	.....	.....	.....	.....	.....	.....	1
\$2 and less than \$3.....	1	.....	.....	.....	.....	.....	1
\$3 and less than \$4.....	1	.....	1	.....	.....	.....	.....	.....	2
\$4 and less than \$5.....	8	1	.....	.....	.....	.....	.....	9
\$5 and less than \$6.....	1	5	1	.....	.....	.....	.....	8
\$6 and less than \$7.....	5	2	4	.....	.....	.....	.....	11
\$7 and less than \$8.....	2	3	.....	1	.....	.....	6
\$8 and less than \$9.....	1	5	5	3	.....	.....	.....	15
\$9 and less than \$10.....	1	3	2	3	.....	.....	.....	10
\$10 and less than \$11.....	2	5	4	1	.....	2	15
\$11 and less than \$12.....	2	4	.....	.....	1	7
\$12 and less than \$15.....	9	11	2	.....	1	24
\$15 and less than \$20.....	2	7	4	2	1	16
\$20 and less than \$25.....	1	1	3	4	1	11
\$25 and less than \$30.....	1	3	1	1	6
\$30 or over.....	1	.....	.....	1	1	.....	3
Total.....	1	17	23	34	35	14	11	6	*145
Per cent.....	7	11.7	15.9	23.4	24.1	9.7	7.6	4.1	2.8

* Of the total, 150, 5 did not state age.

APPENDIX IV—WAGE INVESTIGATION

TABLE IV.—ACTUAL EARNINGS DURING ONE WEEK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY AGES, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years and over
Less than \$2.....	1	2	.....	.....	.....	.....	.....	3
\$2 and less than \$3.....	1	.....	.....	.....	.....	1
\$3 and less than \$4.....	1	4	1	.....	.....	.....	.....	.....	6
\$4 and less than \$5.....	4	1	.....	.....	.....	.....	.....	5
\$5 and less than \$6.....	1	4	3	1	.....	.....	.....	9
\$6 and less than \$7.....	5	3	2	1	.....	1	.....	11
\$7 and less than \$8.....	2	4	1	.....	1	.....	9
\$8 and less than \$9.....	1	4	3	3	.....	1	.....	12
\$9 and less than \$10.....	1	4	5	4	.....	1	.....	16
\$10 and less than \$11.....	1	3	3	1	.....	1	9
\$11 and less than \$12.....	2	5	1	.....	.....	9
\$12 and less than \$15.....	8	8	1	.....	.....	18
\$15 and less than \$20.....	1	7	4	2	1	16
\$20 and less than \$25.....	2	1	4	5	1	14
\$25 and less than \$30.....	1	2	1	.....	5
\$30 or more.....	1	.....	.....	1	.....	.....	2
Total.....	1	17	23	34	35	14	11	6	4
									*145

* Of the total, 150, 5 did not state age.

TABLE V.—WEEKLY RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY OCCUPATIONS, CURRENT PAYROLL, 1914

WEEKLY RATE OF WAGES	WOMEN EMPLOYED AS						All women
	Fore-women	Design-ers	Appren-tices	All other milli-ners	Flower and feather hands	Floor workers	
Less than \$2.....	1	.....	.....	.....	1
\$2 and less than \$3.....	1	.....	.....	.....	1
\$3 and less than \$4.....	1	1	.....	.....	2
\$4 and less than \$5.....	8	1	.....	9
\$5 and less than \$6.....	2	6	.....	.....	8
\$6 and less than \$7.....	2	8	1	.....	11
\$7 and less than \$8.....	1	.....	5	.....	.....	6
\$8 and less than \$9.....	15	.....	.....	15
\$9 and less than \$10.....	10	.....	.....	10
\$10 and less than \$11.....	13	2	1	16
\$11 and less than \$12.....	8	.....	.....	8
\$12 and less than \$15.....	1	.....	23	1	.....	25
\$15 and less than \$20.....	1	4	.....	12	.....	.....	17
\$20 and less than \$25.....	1	1	.....	8	1	.....	11
\$25 and less than \$30.....	4	.....	2	.....	.....	6
\$30 or more.....	3	.....	1	.....	.....	4
Total.....	2	14	7	120	6	1	150

TABLE VI.—ACTUAL EARNINGS IN ONE WEEK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY OCCUPATIONS, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED AS						All women
	Fore-women	Design-ers	Appren-tices	All other milli-ners	Flower and feather hands	Floor workers	
Less than \$2.....	3	.....	.....	.....	3
\$2 and less than \$3.....	1	.....	1
\$3 and less than \$4.....	1	4	1	.....	6
\$4 and less than \$5.....	5	.....	.....	5
\$5 and less than \$6.....	1	9	.....	.....	10
\$6 and less than \$7.....	2	9	.....	.....	11
\$7 and less than \$8.....	1	.....	8	.....	.....	9
\$8 and less than \$9.....	12	.....	.....	12
\$9 and less than \$10.....	15	.....	1	16
\$10 and less than \$11.....	8	2	.....	10
\$11 and less than \$12.....	10	.....	.....	10
\$12 and less than \$15.....	1	.....	17	.....	.....	18
\$15 and less than \$20.....	1	4	.....	11	1	.....	17
\$20 and less than \$25.....	1	2	.....	10	1	.....	14
\$25 and less than \$30.....	3	.....	2	.....	.....	5
\$30 or more.....	3	.....	.....	.....	.....	3
Total.....	2	14	7	120	6	1	150

TABLE VII.—ACTUAL EARNINGS IN ONE WEEK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY YEARS IN THE PRESENT ESTABLISHMENT, CURRENT PAYROLL, 1914

WOMEN EMPLOYED IN PRESENT ESTABLISHMENT													
ACTUAL WEEKLY EARNINGS	All women												
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 4	4 years and less than 5	5 years and less than 6	6 years and less than 7	7 years and less than 8	8 years and less than 9	9 years and less than 10	10 years and less than 15	15 years and less than 20	20 years or more
Less than \$2.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$2 and less than \$3.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$3 and less than \$4.....	4	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$4 and less than \$5.....	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$5 and less than \$6.....	2	4	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
\$6 and less than \$7.....	1	3	5	1	.....	.....	1	.....	.....	.....	.....	.....	.....
\$7 and less than \$8.....	3	1	1	1	.....	.....	2	1	.....	.....	.....	.....	.....
\$8 and less than \$9.....	2	5	1	2	1	.....	.....	.....	.....	.....	.....	.....	.....
\$9 and less than \$10.....	2	2	4	1	1	.....	.....	1	.....	.....	.....	.....	.....
\$10 and less than \$11.....	2	1	1	1	1	.....	.....	.....	1	.....	.....	.....	.....
\$11 and less than \$12.....	.....	.....	1	.....	2	.....	1	2	.....	1	.....	.....	.....
\$12 and less than \$15.....	2	3	.....	1	.....	3	3	3	2	.....	3	2	.....
\$15 and less than \$20.....	1	.....	2	.....	.....	.....	2	.....	1	.....	5	3	.....
\$20 and less than \$25.....	2	2	1	1	.....	.....	.....	.....	.....	.....	5	2	.....
\$25 and less than \$30.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
\$30 or more.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	29	30	17	8	6	3	10	7	5	4	19	9	2
													*149

* Of the total, 150, one did not state years in the present establishment.

TABLE VIII.—YEARS IN THE TRADE OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES
IN NEW YORK CITY, BY PRESENT AGE

YEARS OF EXPERIENCE	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years or more	
Less than 1 year.....	1	8	3	.....	.....	.....	.....	.....	12
1 year and less than 2.....	4	4	2	1	.....	.....	.....	11
2 years and less than 3.....	4	5	2	.....	.....	.....	1	12
3 years and less than 4.....	1	3	3	1	1	.....	.....	9
4 years and less than 5.....	4	5	2	.....	.....	.....	11
5 years and less than 6.....	3	3	1	.....	.....	.....	7
6 years and less than 7.....	5	2	.....	.....	.....	7
7 years and less than 8.....	2	2	.....	2	.....	6
8 years and less than 9.....	4	3	.....	.....	.....	7
9 years and less than 10.....	5	5	.....	.....	.....	10
10 years and less than 15.....	2	16	4	2	1	25
15 years and less than 20.....	8	3	1	12
20 years or more.....	1	4	7	12
Total.....	1	17	22	33	33	14	11	10	*141

* Of the total 150, 5 did not state age and 4 others did not state years in the trade.

TABLE IX.—AGE AT BEGINNING WORK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY PRESENT AGE

Age at Beginning Work	WOMEN WHO WERE									All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years and over	
14 years and less than 15.....	.....	1	3	8	11	4	1	.....	1	29
15 years and less than 16.....	1	6	3	10	4	1	2	1	1	29
16 years and less than 17.....	.....	9	9	4	7	3	1	1	.....	34
17 years and less than 18.....	.....	1	4	1	4	2	1	.....	.....	13
18 years and less than 19.....	.....	.....	3	3	2	3	3	2	1	17
19 years and less than 20.....	.....	.....	1	8	4	.....	.....	.....	.....	13
20 years or more.....	.....	.....	.....	.....	2	1	3	2	1	9
Total.....	1	17	23	34	34	14	11	6	4	*144

* Of the total 150, 5 did not state age, and 1 did not state age at beginning work.

TABLE X.—NATIVITY OF WOMEN EMPLOYED IN MILLINERY WORKROOMS
IN DEPARTMENT STORES IN NEW YORK CITY, BY OCCUPATIONS

OCCUPATION	WOMEN WHO WERE		All women
	Native	Foreign- born	
Forewomen.....	1	1	2
Designers	10	3	13
Apprentices.....	6	1	7
All other milliners.....	102	15	117
Flower and feather hands.....	6	.....	6
Floor workers.....	1	.....	1
Total.....	126	20	*146

* Of the total 150, 4 did not state country of birth.

TABLE XI.—ACTUAL EARNINGS IN ONE WEEK OF WOMEN EMPLOYED IN
MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK
CITY, BY NATIVITY, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN WHO WERE		All women
	Native	Foreign- born	
Less than \$2.....	3	.....	3
\$2 and less than \$3.....	1	.....	1
\$3 and less than \$4.....	4	2	6
\$4 and less than \$5.....	5	.....	5
\$5 and less than \$6.....	8	2	10
\$6 and less than \$7.....	9	2	11
\$7 and less than \$8.....	7	2	9
\$8 and less than \$9.....	12	.....	12
\$9 and less than \$10.....	14	1	15
\$10 and less than \$11.....	7	2	9
\$11 and less than \$12.....	10	.....	10
\$12 and less than \$15.....	15	3	18
\$15 and less than \$20.....	16	.....	16
\$20 and less than \$25.....	10	3	13
\$25 and less than \$30.....	3	2	5
\$30 or more.....	2	1	3
Total.....	126	20	*146

* Of the total 150, 4 did not state country of birth.

TABLE XII.—OCCUPATIONS OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK CITY, BY AGES

Occupation	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more
Forewomen.....	.....	.....	.....	.....	2	.....	.....	.....	2
Designers.....	.....	.....	2	2	1	4	2	.....	13
Apprentices.....	1	3	3	.....	.....	.....	.....	.....	7
All other milliners.....	.....	13	18	31	29	10	9	5	116
Flower and feather hands.....	.....	1	.....	1	2	.....	.....	1	6
Floor workers.....	.....	.....	.....	.....	1	.....	.....	.....	1
Total.....	1	17	23	34	35	14	11	6	*145

* Of the total 150, 5 did not state age.

APPENDIX C
Wages in Millinery Workrooms in Department Stores in New York State, Excluding New York City

TABLE I.—WEEKLY RATES OF WAGES PAID TO WOMEN EMPLOYED IN MILLINERY WORKROOMS IN 34 DEPARTMENT STORES IN 8 CITIES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY YEARS IN THE TRADE, CURRENT PAYROLL, 1914

WEEKLY RATE OF WAGES	WOMEN EMPLOYED IN THE TRADE								All women
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20	20 years or more
Less than \$2.....	5	2	.....	.....	.....	.....	.....	.....	7
\$2 and less than \$3.....	4	2	.....	.....	.....	.....	.....	.....	7
\$3 and less than \$4.....	6	1	.....	.....	.....	.....	.....	.....	10
\$4 and less than \$5.....	1	3	.....	1	.....	.....	.....	.....	8
\$5 and less than \$6.....	.....	2	.....	4	1	.....	.....	.....	15
\$6 and less than \$7.....	1	2	.....	12	4	1	.....	.....	24
\$7 and less than \$8.....	.....	.....	.....	6	10	2	.....	.....	23
\$8 and less than \$9.....	.....	1	.....	7	8	9	.....	.....	31
\$9 and less than \$10.....	.....	.....	.....	2	2	9	.....	2	23
\$10 and less than \$11.....	.....	.....	.....	.....	5	6	.....	.....	16
\$11 and less than \$12.....	.....	.....	.....	.....	.....	2	.....	.....	6
\$12 and less than \$15.....	.....	.....	.....	.....	.....	7	12	10	30
\$15 and less than \$20.....	.....	.....	.....	.....	3	4	5	3	17
\$20 and less than \$25.....	.....	.....	.....	.....	1	.....	5	1	7
\$25 and less than \$30.....	.....	.....	.....	.....	.....	.....	1	5	6
\$30 or more.....	.....	.....	.....	.....	.....	.....	3	1	5
Total.....	17	13	22	34	35	40	45	22	7
									235

* Of the total 245, for whom workers' reports were secured, 10 did not state the number of years they had been in the trade.

TABLE II.—ACTUAL EARNINGS DURING ONE WEEK, OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY YEARS IN THE TRADE, CURRENT PAY-ROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED IN THE TRADE									
	Less than 1 year	1 year and less than 2	2 years and less than 3	3 years and less than 5	5 years and less than 7	7 years and less than 10	10 years and less than 15	15 years and less than 20	20 years and over	All women
Less than \$2.....	4	2	1	.....	.....	.....	.....	.....	.....	7
\$2 and less than \$3.....	5	2	1	.....	.....	.....	1	.....	.....	9
\$3 and less than \$4.....	6	2	4	.....	1	.....	.....	.....	.....	13
\$4 and less than \$5.....	1	3	3	2	.....	.....	.....	.....	.....	9
\$5 and less than \$6.....	.....	2	7	6	1	.....	.....	.....	.....	16
\$6 and less than \$7.....	1	1	3	10	4	3	1	.....	.....	23
\$7 and less than \$8.....	.....	.....	3	5	9	4	1	.....	.....	22
\$8 and less than \$9.....	.....	1	.....	7	8	5	5	.....	1	27
\$9 and less than \$10.....	.....	.....	.....	2	3	9	6	2	1	23
\$10 and less than \$11.....	.....	.....	.....	2	4	7	1	.....	2	16
\$11 and less than \$12.....	.....	.....	.....	.....	.....	1	5	.....	.....	6
\$12 and less than \$15.....	.....	.....	.....	.....	1	7	12	10	.....	30
\$15 and less than \$20.....	.....	.....	.....	.....	3	4	5	3	2	17
\$20 and less than \$25.....	.....	.....	.....	.....	1	.....	4	2	.....	7
\$25 and less than \$30.....	.....	.....	.....	.....	.....	.....	1	4	.....	5
\$30 or more.....	.....	.....	.....	.....	.....	.....	3	1	1	5
Total.....	17	13	22	34	35	40	45	22	7	*235

* Cf the total 245, for whom workers' reports were secured, 10 did not state the number of years they had been in the trade.

TABLE III.—WEEKLY RATES OF WAGES OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY AGES, CURRENT PAYROLL, 1914

WEEKLY RATE OF WAGES	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more
Less than \$2.....	6	.....	.....	.....	.....	1	.....	7
\$2 and less than \$3.....	6	.....	.....	.....	.....	.....	.....	8
\$3 and less than \$4.....	3	5	.....	.....	.....	.....	.....	.....	10
\$4 and less than \$5.....	3	1	.....	.....	.....	.....	.....	8
\$5 and less than \$6.....	2	1	1	1	.....	.....	.....	17
\$6 and less than \$7.....	13	1	1	.....	.....	.....	24
\$7 and less than \$8.....	15	8	1	.....	.....	.....	23
\$8 and less than \$9.....	12	9	1	.....	1	.....	30
\$9 and less than \$10.....	4	16	8	1	.....	1	23
\$10 and less than \$11.....	5	9	4	2	3	17
\$11 and less than \$12.....	6	5	3	.....	.....	6
\$12 and less than \$15.....	1	5	.....	.....	.....	26
\$15 and less than \$20.....	4	9	11	2	.....	20
\$20 and less than \$25.....	4	7	4	3	2	7
\$25 and less than \$30.....	4	2	1	.....	5
\$30 or more.....	3	1	.....	5
Total.....	3	22	52	55	51	30	12	3	*236

* Of the total 245, for whom workers' reports were secured, 9 did not state their age.

TABLE IV.—ACTUAL EARNINGS DURING ONE WEEK, OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY AGES, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more
Less than \$2.....	6	1	.....	.....	.....	1	.....	.....
\$2 and less than \$3.....	6	2	.....	1	.....	.....	.....	8
\$3 and less than \$4.....	5	4	.....	.....	.....	.....	.....	9
\$4 and less than \$5.....	3	3	2	3	1	.....	1	.....	13
\$5 and less than \$6.....	2	14	2	.....	.....	.....	.....	9
\$6 and less than \$7.....	13	8	2	.....	.....	.....	18
\$7 and less than \$8.....	11	9	2	.....	.....	.....	23
\$8 and less than \$9.....	5	13	6	2	.....	.....	22
\$9 and less than \$10.....	5	9	3	2	1	27
\$10 and less than \$11.....	6	5	3	.....	.....	22
\$11 and less than \$12.....	1	5	3	.....	1	17
\$12 and less than \$15.....	4	8	11	3	.....	6
\$15 and less than \$20.....	4	8	4	2	.....	26
\$20 and less than \$25.....	3	.....	2	2	20
\$25 and less than \$30.....	2	.....	.....	7
\$30 or more.....	1	3	1	1	4
Total.....	3	22	52	55	51	30	12	3	8
									*236

* Of the total 245, for whom workers' reports were secured, 9 did not state their age.

TABLE V.—ACTUAL EARNINGS IN ONE WEEK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY YEARS IN THE PRESENT ESTABLISHMENT, CURRENT PAYROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN EMPLOYED IN PRESENT ESTABLISHMENT													All women
	Less than 1 year	1 year and less than 2 years	2 years and less than 3 years	3 years and less than 4 years	4 years and less than 5 years	5 years and less than 6 years	6 years and less than 7 years	7 years and less than 8 years	8 years and less than 9 years	9 years and less than 10 years	10 years and less than 15 years	15 years and less than 20 years	20 years and over	
Less than \$2.....	6	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
\$2 and less than \$3.....	5	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	9
\$3 and less than \$4.....	8	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
\$4 and less than \$5.....	3	1	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
\$5 and less than \$6.....	1	4	8	4	.....	1	.....	.....	.....	.....	.....	.....	.....	18
\$6 and less than \$7.....	7	2	3	3	3	.....	1	.....	2	.....	1	.....	.....	23
\$7 and less than \$8.....	2	5	3	3	4	3	3	.....	.....	1	.....	.....	.....	22
\$8 and less than \$9.....	9	4	2	1	3	1	2	2	.....	3	2	.....	.....	29
\$9 and less than \$10.....	4	3	2	4	2	2	1	.....	1	.....	1	1	.....	24
\$10 and less than \$11.....	4	1	3	3	1	.....	2	.....	1	.....	1	.....	1	17
\$11 and less than \$12.....	.....	1	1	.....	.....	1	.....	1	.....	1	1	.....	.....	6
\$12 and less than \$15.....	1	6	3	2	2	1	2	.....	2	5	1	5	.....	30
\$15 and less than \$20.....	4	3	2	.....	1	3	.....	1	1	.....	4	1	.....	20
\$20 and less than \$25.....	1	.....	2	2	.....	.....	.....	.....	.....	.....	1	1	.....	7
\$25 and less than \$30.....	.....	.....	1	1	.....	.....	1	.....	.....	.....	1	.....	.....	5
\$30 or more.....	2	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	5
Total.....	57	35	39	28	16	14	10	5	9	11	13	9	1	245

TABLE VI.—YEARS IN THE TRADE OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES
IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY PRESENT AGE

YEARS OF EXPERIENCE	WOMEN WHO WERE								All women
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more
Less than 1 year.....	3	11	1	1	.....	.....	1	.....	17
1 year and less than 2.....	5	7	1	.....	.....	.....	.....	13
2 years and less than 3.....	3	15	2	1	.....	1	.....	22
3 years and less than 4.....	2	8	4	1	1	.....	1	17
4 years and less than 5.....	11	4	1	.....	.....	.....	16
5 years and less than 6.....	5	8	3	.....	.....	.....	16
6 years and less than 7.....	3	11	1	3	.....	.....	18
7 years and less than 8.....	10	6	.....	.....	.....	16
8 years and less than 9.....	7	5	5	.....	.....	17
9 years and less than 10.....	3	3	.....	.....	.....	6
10 years and less than 15.....	4	26	9	2	.....	43
15 years and less than 20.....	10	7	1	18
20 years or more.....	2	7
Total.....	3	21	50	55	47	28	11	3	*228

* Of the total 245, for whom workers' reports were secured, 9 did not state their age, and 10 did not report the number of years in the trade.

TABLE VII.—AGE AT BEGINNING WORK BY WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY PRESENT AGE

AGE AT BEGINNING WORK	WOMEN WHO WERE									ALL WOMEN	
	14 years and less than 16	16 years and less than 18	18 years and less than 21	21 years and less than 25	25 years and less than 30	30 years and less than 35	35 years and less than 40	40 years and less than 45	45 years or more	Number	Per cent
Less than 14 years.....	1	.....	.....	.....	.....	.....	.....	.....	.....	6	2.8
14 years and less than 15.....	1	.....	.....	.....	.....	.....	.....	.....	.....	20	9.2
15 years and less than 16.....	1	.....	.....	.....	.....	.....	.....	.....	.....	39	18.1
16 years and less than 17.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55	25.5
17 years and less than 18.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	14.3
18 years and less than 19.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22	10.2
19 years and less than 20.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	6.0
20 years or more.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30	13.9
Total.....	3	21	48	48	47	28	11	3	7	*216	100.0

* Of the total 245, for whom workers' reports were secured, 9 did not state their age and 20 failed to report the age at beginning work.

TABLE VIII.—ACTUAL EARNINGS IN ONE WEEK OF WOMEN EMPLOYED IN MILLINERY WORKROOMS IN DEPARTMENT STORES IN NEW YORK STATE, EXCLUSIVE OF NEW YORK CITY, BY NATIVITY, CURRENT PAY-ROLL, 1914

ACTUAL WEEKLY EARNINGS	WOMEN WHO WERE		All women
	Native	Foreign-born	
Less than \$2.....	8	.....	8
\$2 and less than \$3.....	8	1	9
\$3 and less than \$4.....	13	.....	13
\$4 and less than \$5.....	8	1	9
\$5 and less than \$6.....	18	.....	18
\$6 and less than \$7.....	20	3	23
\$7 and less than \$8.....	19	3	22
\$8 and less than \$9.....	24	5	29
\$9 and less than \$10.....	22	2	24
\$10 and less than \$11.....	17	.....	17
\$11 and less than \$12.....	5	1	6
\$12 and less than \$15.....	24	6	30
\$15 and less than \$20.....	18	2	20
\$20 and less than \$25.....	6	1	7
\$25 and less than \$30.....	5	.....	5
\$30 or more.....	5	.....	5
Total.....	220	25	245

APPENDIX D

In Victoria it has been found practicable to organize a minimum wage board in the millinery trade. The following is the most recent award made by the board. It will be noticed that the award defines minimum wage rates and also the proportionate number of apprentices and improvers who may be employed in any shop.

[Extract from *Victoria Government Gazette*, No. 155, of 10th October, 1913, pages 4539 and 4540.]

FACTORIES AND SHOPS ACTS.

DETERMINATION OF THE MILLINERS' BOARD.

In accordance with the provisions of the Factories and Shops Acts, the Special Board appointed to determine the lowest prices or rates of payment to be paid for wholly or partly preparing or manufacturing, either inside or outside a factory or work-room, the following articles, that is to say:—

“ Women's, girls', and infants' bonnets, caps, and hats, other than straw hats not made on wire shapes or frames, and other than felt hats, but including the trimming of straw hats.”

has made the following Determination, namely:—

1. That previous Determinations of this Board are hereby amended, and such amendments shall come into force and be operative on and after 3rd November, 1913.

The Determination and amendments are printed hereunder.

WAGES.

2. That the following shall be the lowest rate of wages to be paid to — All adults, 25s. per week of 48 hours.

APPRENTICES AND IMPROVERS.

“Apprentice ” means any person under twenty-one years of age bound by indentures of apprenticeship, or any person over twenty-one years of age, who, with the sanction of the Minister, is bound by indentures of apprenticeship. (Act 2386, Section 5.)

“ Improver ” means any person (other than an apprentice) who does not receive a piece-work price or a wages rate fixed by any Special Board for persons other than apprentices or improvers, and who is not

over twenty-one years of age, or who being over twenty-one years of age holds a licence from the Minister to be paid as an improver. (Act 2386, Section 5.)

3. That —
- (a) The lowest rates which may be paid to an apprentice or an improver; and
 - (b) The proportionate number of apprentices and improvers who may be employed by any employer
- shall be as shown in the following table:—

WAGES PER WEEK OF 48 HOURS		Proportionate number
During —	Apprentices and improvers	
	s. d.	
1st year.....	5 0	APPRENTICES. One apprentice to every three or fraction of three workers receiving not less than 25s. per week of 48 hours.
2d ".....	7 6	
3d ".....	10 0	
4th ".....	12 6	
5th ".....	15 0	IMPROVERS. Five improvers to every worker receiving not less than 25s. per week of 48 hours.
6th ".....	20 0	
	and thereafter the minimum wage	

PIECE-WORK.

4. The Board determines under the provisions of Section 144 of the *Factories and Shops Acts* 1912 that any employer may fix and pay piece-work prices to any person or persons or classes of persons employed at any work for which the Board has fixed a minimum wage, provided that any such employer shall base such piece-work prices on the earnings of an average worker working under like conditions, and such piece-work prices shall be fixed so that an average worker can earn not less than the wages that are fixed by the Board for such work.

NOTE.— Cotton and all other materials of which articles provided for in this Determination are made must be supplied by the employer free of charge to the worker, in order that piece-work prices or wages rates payable shall be net.

J. SADLEIR,
Chairman.

Melbourne, October 1, 1913.

VIII. WAGES PAID BY THE NEW YORK TELEPHONE COMPANY TO VARIOUS CLASSES OF OPERATORS IN THE DIFFERENT CITIES IN NEW YORK STATE

AUGUST 6, 1914.

New York State Factory Investigating Commission, 170 Broadway, New York City:

GENTLEMEN: As requested by your Mr. Woolston in his letter of July 14th, I hand you herewith a statement showing the wages paid operators in various cities in the State. Inasmuch as the wages paid are closely associated with the working conditions covering evening, night, Sunday and holiday employment, and in order to place our practices clearly before the Commission, we have prepared a rather detailed memorandum on this subject, which accompanies the wage schedule.

In this connection it may be of interest to know that while the average weekly wage of women employed in telephone exchanges in Greater New York as determined from the schedule is \$10 per week, the actual average earnings, including extra, Sunday and holiday pay, anniversary payments, etc., as shown by payments actually made, is \$11.39. Similar figures for the up-state territory, including all the small towns and villages, show the average weekly wage to be about \$8.10 per employee and the actual average earnings about \$9.12 per employee.

Respectfully,

CHARLES T. RUSSELL,

Counsel.

INFORMATION REQUESTED BY THE NEW YORK STATE FACTORY
INVESTIGATING COMMISSION IN REFERENCE TO WAGES PAID
BY THE NEW YORK TELEPHONE COMPANY TO VARIOUS
CLASSES OF OPERATORS IN THE DIFFERENT CITIES OF THE
STATE OF NEW YORK

In order that the Commission may have a complete picture of the conditions of employment of the operating force of the New York Telephone Company in the State of New York, this memorandum includes a brief outline of the working conditions, hours of labor, etc., as well as a statement of the wage scales in effect in the various cities.

For the purposes of this memorandum, the State of New York will be considered in two parts, known in general as the "Downstate Divisions" and as the "Upstate Divisions." The "Downstate Divisions" include Greater New York, all of Long Island, and Westchester, Putnam and part of Rockland counties. The "Upstate Divisions" include the remaining territory in the State of New York.

The conditions of employment vary slightly in these two general divisions of the territory, and where such differences exist they are pointed out in this memorandum under the general headings "Downstate" and "Upstate."

Central office forces are organized on what may be called three shifts, known as the day force, the evening force and the night force. Operators on the day force work continuously during day hours with suitable periods for luncheon and relief, as explained below. Operators on the evening force work either continuously during afternoon and evening hours, with suitable periods for supper and relief, or work on what is termed "divided hours," including a certain number of hours during the forenoon and a certain number of hours during the evening. Evening operators' tours of duty, as a rule, end not later than 10 p. m., but occasionally extend to 11 p. m. Night operators work during night hours as a rule after 9 or 10 p. m., and until relieved by the day force in the morning, with suitable periods for luncheon relief and rest as described below.

LENGTH OF WORKING DAY

In all of the territory in the State of New York, the length of a central office operator's working day is as follows:

Day Force.—Eight (8) hours excluding lunch relief but including a 15 minute relief period during the employee's long trick at the switchboard either in the morning or afternoon.

Evening Force.—Seven (7) hours excluding supper relief but including a 15 minute relief period during the operator's long trick at the switchboard.

Night Force.—Eight (8) hours excluding luncheon and rest periods.

(NOTE.—It should be understood that while the night force in the larger offices is required to actually work only 8 hours, night operators are, in the majority of cases, in the central office building from 9 to 10 hours. During the periods when they are not actually working, they are on relief in the retiring rooms where accommodations are provided so that they may rest and sleep if they so desire. In smaller offices, where the night traffic is practically negligible, provision is made so that the night operator may sleep during practically all of the time that she is in the office. Such offices are equipped with a night bell circuit so that the operator will be awakened when a call comes in. Under these conditions, while the night operator is available to answer calls during a period of from 8 to 12 hours, the amount of labor performed by her is very small and there are long stretches during the night period when she is asleep and performing no labor whatever.)

SUNDAY WORK

Operators on the three forces take their turns at working on Sundays. A Sunday relief force is provided so that each operator who works on any Sunday will have a day off during the week following the Sunday worked.

(NOTE.—It will be noted from this arrangement that while no operator works more than six days in any one calendar week, operators who work on Sunday will in the majority of cases work more than six out of seven consecutive days in the period

including a Sunday worked; for example: An operator who works on the six week days from Monday July 13th, to Saturday, July 18th, inclusive, may be assigned to work on Sunday, July 19th. Thursday, July 23d, may be assigned to this operator as her day off in the week succeeding the Sunday worked. Under these conditions, while this operator will have worked only six days in the calendar week, from Sunday, July 12th, to Saturday, July 18th, and only six days in the calendar week from Sunday, July 19th, to Saturday, July 25th, she will have worked ten consecutive days from Monday, July 13th, to Wednesday, July 22d, inclusive.)

Payment for Sunday work is made as follows:

Downstate.—At the rate of time and a half for time worked on the first Sunday worked in any calendar month, and at the rate of double time for time worked any Sunday subsequent to the first Sunday worked in any calendar month. No payment is made for the day off allowed to operators on account of Sunday work.

Upstate.—At the rate of time and a half for time worked on any Sunday in the calendar month. No payment is made for the day off allowed to operators on account of Sunday work.

HOLIDAY WORK

Operators on the various forces in the central offices take their turns at working on holidays. No subsequent day off is allowed for the holiday worked. Payment for holiday work is as follows:

Downstate.—All employees receive full pay for the holiday whether they work or not. Employees who work on holidays receive additional pay at the full rate for the time worked.

Upstate.—All employees receive full pay for the holiday whether they work or not. Employees who work on holidays receive additional pay at half rate for the time worked.

PAYMENTS FOR OVERTIME WORK

Payments for time worked in excess of the regular schedule are made at the rate of time and a half in all divisions. Overtime work is not required except under unusual conditions, such as storms, floods, etc.

VACATION ALLOWANCES

The following vacation allowances are made in all divisions:

Employees who enter the service prior to January first of the vacation year but not more than one year prior to July first of vacation year — one week with pay.

Employees who enter the service more than one year but less than two years prior to July first of the following year — one week with pay — one week without pay.

Employees who enter the service two years prior to July first of vacation year — two weeks with pay.

SATURDAY AFTERNOONS OFF

The forces in the downstate divisions are so arranged that during the sixteen weeks beginning with the first week in June, each employee on the day and evening forces has at least one Saturday afternoon off out of each four, with pay. Additional Saturday afternoons off, with pay, are given when the condition of the force and the volume of traffic will so admit. In the upstate divisions, Saturday afternoons off, with pay, are given when traffic conditions permit.

ANNIVERSARY PAYMENTS

In addition to the regular wages paid central office employees, bonus payments are made on the anniversaries of the date of an employee's engagement in the operating force of the company, as follows:

On the second anniversary	\$25 00
On the third and each successive anniversary to the 6th, inclusive	50 00
On the 7th anniversary and each successive anniversary thereafter	100 00
	=====

EMPLOYEE'S PENSIONS, DISABILITY BENEFITS AND DEATH BENEFITS

The New York Telephone Company has in effect a plan of pensions and benefits in which the operating force participates. Under this plan benefits are paid to employees who have been in

the service for a certain length of time. Sick benefits are paid to employees who have been in the service for a period of two years, such payments including full salary for a length of time that is dependent upon the term of service. The minimum payment under this plan for sickness is full pay for four weeks and half pay for nine weeks.* Supplementing the general plan under which payments are made from the fund established for the purpose, the company from company funds makes payments under special conditions in the case of sickness of employees who are not eligible to payment under the plan. The payments authorized from the company funds provide for minimum payment, in the case of an employee who has been in the service less than one year, of full pay for one week and half pay for two weeks. More liberal allowances can be made, however, when the case seems to warrant such payment.

WAGE SCALES

All wages are paid on a weekly basis, the working week consisting of six days of either seven or eight hours each, as described under "Length of Working Day."

The following tables show the wages paid in various groups of cities and towns. In these tables the figures shown under the general heading "Operators" and opposite the words "Day," "Evg." and "Ngt." give the normal number of months from the date of employment which is normally required for an operator on the day, evening or night forces, respectively, to reach the weekly rate shown at the head of the column. If the employee shows unusual proficiency she will be advanced more rapidly than is shown in the schedule. If, on the other hand, she does not develop as rapidly as the normal employee, her rate of advancement will be somewhat retarded. Employees, however, who clearly demonstrate that their ability is not such as will enable them to earn wages approximately in accordance with the schedule shown, are not retained in the service except under unusual conditions.

* The company has issued a pamphlet giving details of this plan.

The figures shown under the general heading "Supervisory and Auxiliary force" show the Maximum weekly rates of pay made to these supervisory and auxiliary forces. These rates of pay are obtained within a period of two years from the date of promotion of the employee from the operating to the supervisory and auxiliary force.

The following abbreviations have been used in compiling these tables:

- S = Student operator.
- Snr. Pr.= Senior operator.
- Srs.= Supervisors.
- Girl Mgs.= Girl Messengers.

In these schedules the salaries of chief operators are not shown. The salaries of chief operators vary with the size of the office and number of employees, up to a maximum of \$30 per week in the larger offices in Manhattan.

1. BOROUGH OF MANHATTAN — NEW YORK CITY

	OPERATORS										SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column										Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	3	7	12	21	...	...	...	\$11	\$14	\$6	\$10	\$13
Evening.....	8	3	7	12	21	...	...	12	15	.....	.....	.....
Night.....	8	3	7	12	21	...	13	16	.....	.....	.....

2. BOROUGH OF BRONX — NEW YORK CITY

	OPERATORS										SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column										Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	...	8	3	7	12	18	24	...	...	...	\$11	\$14	\$5	\$10	\$13
Evening.....	8	3	7	12	18	24	...	...	12	15	.....	.....	.....
Night.....	8	3	7	12	18	24	...	13	16	.....	.....	.....

2. BOROUGH OF BROOKLYN, QUEENS AND RICHMOND—NEW YORK CITY

	OPERATORS										SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column										Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....		8	3	7	12	21					\$10	\$13	\$5	\$10	\$13
Evening.....			8	3	7	12	21				11	14			
Night.....				8	3	7	12	21			12	15			

4. MT. VERNON, NEW ROCHELLE, WHITE PLAINS AND YONKERS

	OPERATORS										SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column										Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....		8	3	7	12	24					\$10	\$13	\$5	\$9	\$12
Evening.....			8	3	7	12	24				11	14			
Night.....				8	3	7	12	24			12	15			

5. DOBBS FERRY, LARCHMONT, MAMARONECK, RYE, MT. KISCO, TUXEDO, FREEPORT, GARDEN CITY, GLEN COVE, ROCKVILLE CENTRE, LONG BEACH, OYSTER BAY AND PT. WASHINGTON

	OPERATORS										SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column										Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13	Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	3	7	12	18	36					\$10	\$12	\$4	\$9	\$12
Evening.....		8	3	7	12	18	36				11	13			
Night.....			8	3	7	12	18	36			12	14			

6. BREWSTER, KATONAH, STONY POINT, YORKTOWN, BABYLON, BAY SHORE, HUNTINGTON, NORTHPORT, PATCHOGUE, PT. JEFFERSON, QUOGUE, RIVERHEAD, SAYVILLE AND SHOREHAM

7. BUFFALO, ROCHESTER AND NIAGARA FALLS

	OPERATORS											SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column											Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13		Ser. pr.	Ser.	Miss mgs.	Clerks	Chief clerk
Day.....		8	8	7	12	24						\$10	\$12	\$5	\$9	\$12
Evening.....			8	4	12	24						10	12			
Night.....				8	4	12	24					11	13			

For toll boards and information bureaus located in the above cities, the following wage schedule applies:

	OPERATORS											SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column											Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13		Ser. pr.	Ser.	Girl mgs.	Clerks	Chief clerk
Day.....		8	3	7	12	21	30					\$11	\$13	\$5	\$9	\$13
Evening.....			8	4	12	21	30					11	13			
Night.....				8	4	12	21	30				12	14			

8. JAMESTOWN, LOCKPORT, OLEAN AND TONAWANDA

9. ATTICA, BROCKPORT, GENESEO, HAMBURG, LEROY, SPRINGVILLE, WARSAW

10. ALBANY, SCHENECTADY AND TROY

	\$4	\$5	\$6	\$7	\$8	\$8 50 and \$9	\$10	\$11	\$12	\$13	Sur pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....		8	3	7	15	24					10	\$12	\$5	\$9	\$12
Evening.....		8	3	7	16	24					10	12			
Night.....			8	4	12	24					10	12			

Local operators receive \$8.50 per week; toll operators and information operators receive \$9 per week.

11. AMSTERDAM, KINGSTON, NEWBURG, POUGHKEEPSIE, GLENS FALLS
SARATOGA SPRINGS

T AND AUXILIARY FORCE

how maximum weekly
rates of pay

	\$4	\$5	\$6	\$7	\$8	\$8 50 and \$9	\$10	\$11	\$12	\$13	Sur pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	3	6	12	21	30					\$10	\$12	\$4	\$9	\$12
Evening.....	8	3	6	12	21	30					10	12			
Night.....		8	4	10	19	30					10	12			

Local operators receive \$8.50 per week; toll operators and information operators receive \$9 per week.

12. HUDSON, CATSKILL, MECHANICSVILLE, ARCADE, PENN YAN AND VICTOR

13. SYRACUSE, ITHACA AND UTICA

												SUPERVISORY AND AUXILIARY FORCE				
												Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13		Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	1	3	10	21							\$9	\$12	\$4	\$9	\$12
Evening.....	8	1	3	10	21							9	12			
Night.....	8	1	3	10	21							9	12			

For toll board and information bureaus in the above cities, the following wage schedule applies:

	OPERATORS											SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column											Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13		Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	1	3	10	18	27						\$10	\$13	\$4		
Evening.....	8	1	3	10	18	27						10	13			
Night.....	8	1	3	10	18	27						10	13			

14. AUBURN, BINGHAMTON, ELMIRA, ONEIDA, ROME, WATERTOWN, CORNING AND LESTERSHIRE

												SUPERVISORY AND AUXILIARY FORCE				
												Figures show maximum weekly rate of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13		Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	3	■	18	30							\$9	\$11			
Evening.....	8	3	9	18	30							9	11			
Night.....	8	3	9	18	30							9	11			

15. ADDISON, BATH, CLINTON, HAMILTON, HORSEHEADS, OWEGO AND WATKINS

	OPERATORS											SUPERVISORY AND AUXILIARY FORCE				
	Figures in spaces show average number of months to reach weekly rate shown at head of column											Figures show maximum weekly rates of pay				
	\$4	\$5	\$6	\$7	\$8	\$9	\$10	\$11	\$12	\$13		Snr. pr.	Srs.	Girl mgs.	Clerks	Chief clerk
Day.....	8	4	10	30	48							\$9	\$10			
Evening.....	8	4	10	30	48							9	10			
Night.....	8	4	10	30	48							9	10			

IX. WAGES OF EMPLOYEES OF CERTAIN PUBLIC UTILITIES

STATE OF NEW YORK,

PUBLIC SERVICE COMMISSION, SECOND DISTRICT,

ALBANY, *July 20, 1914.*

MR. HOWARD B. WOOLSTON, *Director of Investigation, New York State Factory Investigating Commission, 22 East 17th Street, New York City:*

DEAR SIR.— In acknowledgment of your letter of the 14th instant requesting data regarding rates of wages paid by public service corporations, we desire to state that the Commission publishes annually a volume of statistics relating to steam and electric railroads, included in which are tables giving wages of employees for both of these classes of corporations. The latest published volume is that for the year ended June 30, 1912. The data for the year ended June 30, 1913, has been in the hands of the printer for some time and should be available for distribution within a few months. These tables will give extended information on rates of wages paid electric railroad employees for all companies reporting to the Commission and if you so desire copies can be sent you when this last volume is received from the printer.

The information relative to wages of classified employees of other public utilities, including telephone corporations, is not tabulated. However, as your letter definitely referred to telephone operators and employees of traction companies we have compiled a statement giving the number of telephone switchboard operators and their average daily compensation taken from the payroll for December, 1913, of a number of the larger telephone corporations operating in the principal cities of the State. Likewise, with regard to traction employees, a statement has been made from tabulated figures for the year ended June 30, 1913, covering average rate of compensation for a number of

the more important traction lines operating in the large cities within the State and reporting to this Commission. Copies of these statements are enclosed herewith. It should be stated that only a portion of the number of telephone corporations reporting to the Commission give reliable information regarding employees and wages, the balance either reporting nothing or reporting data in such shape that the average rate of any one class of employees can not be obtained.

For the Commission

FRANK H. MOTT

Secretary

TELEPHONE SWITCHBOARD OPERATORS — AVERAGE DAILY RATE OF
COMPENSATION BASED ON PAYROLL FOR DECEMBER, 1913

	Number of operators	Territory operated in	Average daily compen- sation
New York Telephone Company.....	9,456	New York City and other locali- ties over the State.....	\$1 58
Federal Telephone Company.....	412	Buffalo and western part of State	84
Albany Home Telephone Company....	7	Albany and vicinity.....	1 09
American Telephone and Telegraph Company.....	1,163	Principally toll service.....	1 47
Black River Telephone Company.....	48	Lowville and vicinity.....	99
Glen Telephone Company.....	78	Gloversville and Johnstown and vicinity.....	1 29
Granville Telephone Company.....	32	Granville.....	95
Rochester Telephone Company.....	122	Rochester City.....	1 30
Home Telephone Company of James- town.....	30	Jamestown.....	79
Otsego and Delaware Telephone Com- pany.....	45	Oneonta and vicinity.....	1 00
Mountain Home Telephone Company.	113	Plattsburgh and northern New York.....	1 04
Niagara County Telephone Company*.	38	Niagara Falls and Lockport....	1 02
Northwestern Telephone Company....	22	Carthage and Copenhagen, etc..	81
Orange County Telephone Company..	19	Middletown, Bloomingburgh and others.....	94
York State Telephone Company.....	58	Elmira and Binghamton.....	82

* June payroll.

APPENDIX IV—WAGE INVESTIGATION

AVERAGE RATE OF COMPENSATION OF EMPLOYEES OF CERTAIN ELECTRIC RAILROADS OPERATING IN VARIOUS CITIES IN THE
STATE OF NEW YORK FOR THE YEAR ENDED JUNE 30, 1913

Class of Employees	NEW YORK STATE RYS.		INTERNATIONAL RY.		UNITED TRACTION CO.		EMPIRE UNITED RYS.		SCHENECTADY RY.		BUFFALO & LAKE ERIE TRACTION	
	Operating in cities of Canandaigua, Geneva, Rome, Rochester, Syracuse and Utica		Operating in cities of Buffalo, Lockport, Niagara Falls and North Tonawanda		Operating in cities of Albany, Cohoes, Rensselaer, Troy and Watervliet		Operating in cities of Auburn, Oswego, Rochester and Syracuse		Operating in cities of Albany, Schenectady, Troy and Watervliet		Operating in cities of Buffalo and Dunkirk	
	Average rate of pay		Average rate of pay		Average rate of pay		Average rate of pay		Average rate of pay		Average rate of pay	
	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit
	Dollars		Dollars		Dollars		Dollars		Dollars		Dollars	
General office staff:												
General officers.....	5,576.83	year	457.29	month	51.64	week	238.37	month	295.44	month	233.33	month
Other officers.....	237.33	month	226.47	month	26.17	week	.....	.....	153.59	month	176.66	month
Clerks and bookkeepers, men.....	68.36	month	60.36	month	17.15	week	71.63	month	85.46	month	65.00	month
Clerks and bookkeepers, women..	42.38	month	31.51	month	9.53	week	59.95	month	34.58	month	30.00	month
Stenographers and typists, men..	44.33	month	64.47	month	15.68	week	52.50	month	85.00	month	.....	.....
Stenographers and typists, women	54.68	month	33.49	month	11.78	week	50.00	month	67.33	month	47.50	month
Janitors and watchmen.....	1.50	day	.....	.....	13.89	week	.20	hour	45.37	month	.....	.....
Messengers and others.....	16.04	week	68.28	month	16.92	week	32.13	month	25.00	month	.....	.....
Transportation:												
Inspectors.....	92.48	month	23.63	week	.286	hour	117.63	month	23.08	week	90.00	month
Train clerks and dispatchers.....	91.11	month	18.86	week	.....	.....	.....	.....	.....	.....	100.00	month
Starters.....	2.83	day	.....	.....	.257	hour	.....	.....	17.80	week	65.00	month
Division superintendents.....	128.12	month	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Division office clerks.....	.....	.....	.....	.....	.238	hour	.....	.....	.....	.....	.....	.....
Depot and station masters.....	90.21	month	17.33	week	.....	.....	41.09	month	23.48	week	.....	.....

	49.80	month	13.80	week	.....	..	73.90	month	62.98	month	55.00	month
Tide agents	18.33	week	..	..	..	..	..	..	..	..	..	..
Register takers..	261	hour	.232	hour	.272	hour	.258	hour	.27	hour	.227	hour
Conductors.....	261	hour	.246	hour	.273	hour	.265	hour	.27	hour	.227	hour
Motormen.....	221	hour	.225	hour	.206	hour	.208	hour	80.29	month	40.00	month
Switchmen, flagmen and yardmen	197	hour	.185	hour	.170	hour	.188	hour	.185	hour	.185	hour
Road and track men..	50.00	month	.184	hour	.184	hour	59.41	hour	89.70	month	60.00	month
Station porters and watchmen..	60.82	month	.117	hour	..	..	41.20	month	..	..	..	..
Freight laborers	171	hour	206	hour	184	hour	..	..	78.18	month	..	..
Hoisters, stablemen, etc ..	50	hour	..	..	..	..	..	..	..	..	..	..
Hired teams	40.00	month	..	..	..	..	..	..	..	..	..	..
Information clerk	2.53	day	..	..	..	..	..	..	..	..	..	..
Deputy sheriff .....	..	..	14.04	week	..	..	..	..	..	..	..	..
Gatemen and platform men....	..	..	..	..	..	..	..	..	..	..	..	..
Investigators and claim investi-	..	..	..	..	..	..	..	..	..	..	..	..
gators .....	..	..	85.20	month	26.77	week	..	..	..	..	..	..
Freight clerks .....	..	..	213	hour	..	..	..	..	..	..	..	..
Freight trainmen .....	..	..	245	hour	..	..	..	..	..	..	65.00	month
Freight agents .....	..	..	..	..	..	..	..	..	..	..	..	..
Transfer agents .....	..	..	..	..	258	hour	..	..	..	..	..	..
Guards.....	..	..	..	..	..	..	.145	hour	..	..	..	..
Express trainmen, motorman and	..	..	..	..	..	..	..	..	..	..	..	..
other employees .....	..	..	..	..	..	..	.253	hour	.285	hour	..	..
Telephone operators .....	..	..	..	..	..	..	..	..	49.91	month	..	..
Superintendents .....	..	..	..	..	..	..	..	..	..	..	142.00	month
Station and miscellaneous clerks	..	..	..	..	..	..	..	..	..	..	50.00	month
Other miscellaneous transporta-	..	..	..	..	..	..	..	..	..	..	..	..
tion employees .....	..	..	268	hour	..	..	66.49	month	.20	hour	..	..

Company is given a list of the cities through which these roads operate or in which they have trackage rights although a line.
interurban companies:

airroad,
vania Traction.

**AVERAGE RATE OF COMPENSATION OF EMPLOYEES OF CERTAIN ELECTRIC RAILROADS OPERATING IN VARIOUS CITIES IN THE STATE OF NEW YORK FOR THE YEAR
ENDED JUNE 30, 1913 (continued)**

CLASS OF EMPLOYEES	NEW YORK STATE SYS.		INTERNATIONAL RT.		UNITED TRACTION CO.		EMPIRE UNITED SYS.		SCHENECTADY SY.		BUFFALO & LAKE ERIE TRACTION	
	Operating in cities of Buffalo, Lockport, Niagara Falls and North Tonawanda		Operating in cities of Buffalo, Lockport, Niagara Falls and North Tonawanda		Operating in cities of Albany, Cohoes, Rensselaer, Troy and Watervliet		Operating in cities of Auburn, Oswego, Rochester and Syracuse		Operating in cities of Albany, Schenec- tady, Troy and Watervliet		Operating in cities of Buffalo and Dun- kirk	
	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit
Average rate of pay												
and Utilities												
Power:												
Engineers	268	hour	.371	hour							.30	hour
Firemen	220	hour	174	hour							185	hour
Dynamo and switchboard men	209	hour	241	hour	282	hour	2 27	day	81 73	month	225	hour
Electricians	106 74	month	311	hour			3 37	day	285	hour	245	hour
Linenmen and third rail patrolmen	269	hour	296	hour	210	hour	.225	hour	.31	hour	65 00	month
Oilmen and wipers			184	hour							190	hour
Coal passers			199	hour							176	hour
Ashmen			157	hour							175	hour
Water tenders			285	hour								
Boiler cleaners			192	hour								
Other power plant employees	196	hour	227	hour	.189	hour			.25	hour		
Car-houses and shops:												
Car cleaners	173	hour	.186	hour	.181	hour	177	hour	.16	hour	.174	hour
Car oilers	214	hour	201	hour	204	hour	.193	hour	17	hour		
Lamp trimmers	197	hour					.189	hour	.17	hour		

[illegible]

Under the name of each traction company is given a list of the cities through which these roads operate or in which they have trackage rights although in

APPENDIX IV—WAGE INVESTIGATION

CLASS OF EMPLOYEES	HUDSON VALLEY RY.	YONKERS R. R.	WESTCHESTER ELECTRIC R. R.	AUBURN AND SYRACUSE ELECTRIC R. R.	WESTERN NEW YORK & PENNSYLVANIA TRAC.
	Operating in cities of Glens Falls and Troy	Operating in cities of Mount Vernon, Yonkers and New York	Operating in cities of Mount Vernon, New York and New Rochelle	Operating in cities of Auburn and Syracuse	Operating in cities of Olean and Salamanca
	Average rate of pay	Average rate of pay	Average rate of pay	Average rate of pay	Average rate of pay
	AmountUnit	AmountUnit	AmountUnit	AmountUnit	AmountUnit
General office staff:	Dollars	Dollars	Dollars	Dollars	Dollars
	167.08	703.69	150.00	96.25	3,066.67
	month	month	month	month	year
	85.36	130.75			1,500.00
	month	month			year
			84.60		
			month		
	13.67	17.30	2.82	56.69	703.24
	week	week	day		year
	9.02		1.25		703.24
	week		day		year
	9.35	21.00			
	week	week			
	9.75	12.00	1.73	58.30	703.24
Transportation:	12.15	1.75	1.81		10.00
	week	day	day		month
	17.11	.57		55.00	
	week	day			
			801.97		
			month		
	17.98	3.00	3.00	112.35	
	week	day	day	month	
	18.66				
	week				
	6.37			2.22	27.10
	week			day	month
	.270	.253	.25	.253	.19
	hour	hour	hour	hour	hour
	.270	.259	.25	.253	.19
	hour	hour	hour	hour	hour

Switchmen, flagmen and yardmen.....	.133	hour	.....	2 00	day	.....	21.83	month
Towermen.....	2 00	day	.....	.....	.....	.....	.....	hour
Road and track men.....	.173	hour	.....	2 02	day	1.76	1.66	.....
Station porters and watchmen.....	126	hour	.....	.....	day	1 06	.....	.....
Starters.....	.....	.....	.....	3 00	day	.....	.....	.....
Hostlers, stablemen, etc.....	.....	.....	.....	2 46	day	1 43	.....	.....
Freight agents.....	.....	.....	.....	.....	.....	67 40	.....	month
Depot masters.....	.....	.....	.....	.....	.....	.....	55.00	month
Freight trainmen.....	.....	.....	.....	.....	.....	288	.....	hour
Freight laborers.....	.....	.....	.....	.....	.....	.....	71.85	month
Guards and mail carriers.....	.....	.....	.....	.....	.....	.....	22.50	month
Baggage men.....	.....	.....	.....	.....	.....	.....	15.91	month
Superintendent of transportation.....	.....	.....	.....	.....	.....	.....	89.44	month
Other transportation employees.....	.....	.....	.....	1.74	day	.....	.....	.....
Miscellaneous car service employees.....	.....	.....	.....	.....	.....	278	.....	.....
Power:								
Engineers.....	31.93	week	.....	.....	.....	.....	82.50	month
Electrical engineers.....	.....	.....	40.62	month	.....	.....	.....	.....
Firemen.....	.206	hour	.....	.....	year	.....	.....	.....
Oilers and wipers.....	.227	hour	2 00	day	day	.....	55.00	month
Coal passers and ashmen.....	177	hour	.....	.....	.....	.....	.....	.....
Water tenders.....	.227	hour	.....	.....	.....	.....	.....	.....
Dynamo and switchboard men.....	.209	hour	2.86	day	day	2.25	64.36	month
Electricians.....	.265	hour	.....	.....	.....	3 44	80.00	month
Linemen.....	.209	hour	.....	.....	day	2 53	59.38	month
Other power plant employees.....	.206	hour	1.90	day	.....	.....	.....	.....

a list of the cities through which these roads operate or in which they have trackage rights although in series:

AVERAGE RATE OF COMPENSATION OF EMPLOYEES OF CERTAIN ELECTRIC RAILROADS OPERATING IN VARIOUS CITIES IN THE STATE OF NEW YORK FOR THE YEAR ENDED JUNE 30, 1913 (continued)

CLASS OF EMPLOYEES	HUDSON VALLEY RY.	YONKERS R. R.	WESTCHESTER ELEC- TRIC R. R.	AUBURN AND SYRA- CUSE ELECTRIC R. R.	WESTERN NEW YORK & PENNSYLVANIA TRAC.
	Operating in cities of Glens Falls and Troy	Operating in cities of Mount Vernon, Yonkers and New York	Operating in cities of Mount Vernon, New York and New Rochelle	Operating in cities of Auburn and Syracuse	Operating in cities of Olean and Salamanca
	Average rate of pay	Average rate of pay	Average rate of pay	Average rate of pay	Average rate of pay
	AmountUnit Dollars	AmountUnit Dollars	AmountUnit Dollars	AmountUnit Dollars	AmountUnit Dollars
Car-houses and shops:					
Car cleaners.....	.174hour	1.75day	1.60day	1.53day	52.50month
Car oilers.....	.201hour	.....	1.97day	1.99day	.....
Car-house men.....	.216hour	1.75day	2.01day	1.85day	62.72month
Repair men.....	.....	.....	2.01day	.....	.....
Other car-house employees.....	.216hour	2.55day	2.83day	45.36month	62.72month
Carpenters.....	.258hour	2.64day	3.00day	3.00day	58.88month
Blacksmiths.....	.292hour	2.70day	2.50day	2.00day	65.00month
Blacksmiths' helpers.....	.....	2.00day	.....	.....	.....
Machinists.....	.275hour	.....	.....	2.96day	.....
Electrical helpers.....	.289hour	3.09day	.....	1.90day	.....
Painters.....	.254hour	2.50day	.....	.....	65.00month
Lamp trimmers.....	.....	.....	.....	1.70day	.....
Other classes of employees:					
Storekeeper.....	.....	.....	1.61day	.....	.....
Park employees.....	.....	.....	.....	2.17day	1.50day
Traffic.....	.....	.....	.....	48.88month	.....
Total number employed at close of year....	452	292	341	280	261
Total compensation during year.....	\$291,386	\$284,218	\$239,228	\$177,623	\$148,716

AVG. RATES OF COMPENSATION OF EMPLOYEES OF CERTAIN ELECTRIC RAILROADS OPERATING IN VARIOUS CITIES IN THE STATE OF NEW YORK FOR THE YEAR ENDING JUNE 30, 1913 (continued)

CLASS OF EMPLOYEES	JAMESTOWN STREET RY.		POUGHKEEPSIE CITY AND WAPPINGERS FALLS ELSD.		ORANGE COUNTY TRAC- TION		KINGSTON CONSOLIDATED	
	Operating in city of Jamestown		Operating in city of Poughkeepsie		Operating in city of Newburgh		Operating in city of Kingston	
	Average rate of pay		Average rate of pay		Average rate of pay		Average rate of pay	
	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit
General office staff:	Dollars		Dollars		Dollars		Dollars	
	20.27	day	96.70	week	159.72	month	158.50	month
	3.55	day	28.90	week	37.40	week		
			18.76	week			87.00	month
	1.80	day			9.08	week		
	1.54	day	9.00	week				
Transportation:	2.00	day	15.39	week	15.00	week		
	3.15	day						
	2.92	day						
	.22	hour	12 10	week	.208	hour		
							315	hour

a list of the cities through which these roads operate or in which they have trackage rights although in parties:

AVERAGE RATE OF COMPENSATION OF EMPLOYEES OF CERTAIN ELECTRIC RAILROADS OPERATING IN VARIOUS CITIES IN THE STATE OF NEW YORK FOR THE YEAR ENDED JUNE 30, 1913 (continued)

CLASS OF EMPLOYEES	JAMESTOWN STREET RY.		POUGHKEEPSIE CITY AND WAPPINGERS FALLS ELEC.		ORANGE COUNTY TRAC-TION		KINGSTON CONSOLIDATED	
	Operating in city of Jamestown		Operating in city of Poughkeepsie		Operating in city of Newburgh		Operating in city of Kingston	
	Average rate of pay		Average rate of pay		Average rate of pay		Average rate of pay	
	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit
Transportation (continued):	Dollars		Dollars		Dollars		Dollars	
	.23	hour	12.82	week	.209	hour	.219	hour
							.215 & .219	hour
	.18	hour	10.84	week	.174	hour	11.00	week
					17.65	week		
					14.58	week		
					12.14	week		
					11.52	week		
Power:	.30	hour			19.25	week	18.50	week
	.20	hour			.20	hour	14.00	week
	.20	hour					10.49	week
	.20	hour						
	.20	hour						
	.25	hour					25.00	week
	.25	hour	14.92	week	30.40	week	14.00	week
					.20	hour		

Car-houses and shops:									
Car cleaners .....	.175	hour	9 75	week				11 00	week
Car oilers .....	.20	hour							
Car-house men .....	.20	hour			.16	hour			
Car-house foreman									
Other car-house employees .....	.20	hour			.20	hour		18 00	week
Blacksmiths .....	.20	hour	18 00	week	.225	hour		16 00	week
Mechanists .....	.25	hour			.17	hour		11 29	week
Mechanists' helpers .....	.20	hour			20 64	week			
Carpenters			20 00	week				14 52	week
Painters .....	.175	hour	17 00	week	.20	hour			
Electrical helpers									
Other shop employees .....	.20	hour	13 98	week					
Other classes of employees:									
Park employees					10 93	week			
Traffic								11 21	week
Total number employed at close of year.....	150		108		129		94		
Total compensation during year.....	\$116,800		\$73,855		\$84,649		\$48,556		

Under the name of each traction company is given a list of the cities through which these roads operate or in which they have trackage rights although in

companies:

tion

AVERAGE RATE OF COMPENSATION OF EMPLOYEES OF CERTAIN ELECTRIC RAILROADS OPERATING IN VARIOUS CITIES IN THE STATE OF NEW YORK FOR THE YEAR ENDED JUNE 30, 1913 (concluded)

CLASS OF EMPLOYEES	SYRACUSE AND SUBURBAN		CORNING AND PAINTED POST STREET RY.		HORSELL TRACTION CO.		OGDENSBURG STREET RY.	
	Operating in city of Syracuse		Operating in city of Corning		Operating in city of Horsell		Operating in city of Ogdensburg	
	Average rate of pay		Average rate of pay		Average rate of pay		Average rate of pay	
	Amount	Unit	Amount	Unit	Amount	Unit	Amount	Unit
General office staff:	Dollars		Dollars		Dollars		Dollars	
	135.71	month	112.00	month	91.29	month	20.00	week
	92.50	month						
					2.00	day	12.00	week
General officers								
Other officers								
Clerks and bookkeepers, men								
Clerks and bookkeepers, women								
Stenographers and typists, women								
Janitors and watchmen								
Transportation:								
Inspectors	2.75	day						
Starters								
Register takers								
Conductors	.24	hour	.19	hour	2.05	day	.165	hour
Motormen	.24	hour	.19	hour	2.05	day	.166	hour
Extra conductors and motormen	.165	hour	.15	hour	2.05	day	.246	hour
Road and track men					2.00	day		
Train clerks and dispatchers								
Freight agents								
Switchmen, flagmen and yardmen								
Station porters and watchmen								
Ticket agents	47.50	month						
Freight laborers	2.67	day						
	43.33	month						
Power:								
Engineers								
Firemen								
Coal passers								

[illegible]

Under the name of each traction company is given a list of the cities through which these roads operate or in which they have trackage rights although in companies:

tion.

X.

**THE RELATION OF IRREGULAR EMPLOYMENT TO THE
LIVING WAGE FOR WOMEN**

By IRENE OSGOOD ANDREWS

Assistant Secretary, American Association for Labor Legislation

PREFACE

Two of the big distinct movements which have recently emerged from the heterogeneous strivings for social justice of the past five years in America are centered about the problems of unemployment and the minimum wage. This report is an attempt in a small way to bridge the gap between the two movements and to show the relation of one to the other in so far as they are concerned with women in industry.

In this investigation, as in many others, material of value was at hand in voluminous printed reports. But the bits of information on the particular topic under consideration were scattered and elusive. By bringing together in convenient form the main existing facts and by analyzing them for purposes of comparison, their true significance is brought out. The analysis of conditions has been confined mainly to irregular employment over a yearly period; no comparisons for long periods of time have been attempted in this report.

The three main sources from which the greater part of the material for this report has been ferreted out are the searching investigations made during the past few years by the United States Bureau of Labor, the Massachusetts Minimum Wage Commission, and the Factory Investigating Commission of New York State. For the painstaking examination of these and numerous scattering articles and reports cordial acknowledgment is here made to Miss Margaret Hobbs who has assisted at every step in the preparation of this report.

I. O. A.

CONTENTS

	PAGE
I. Introductory Summary	505
1. Statement of the Problem	505
The relation between the living wage and regularity of work	505
2. The Economic Helplessness of Women	507
Employment in seasonal trades	507
Low wages	507
Lack of organization	507
Immobility	507
3. Kinds of Irregular Work	509
Loss of work due to reduction in numbers employed	509
Short-time work (by day or week)	509
Reduction in rate of pay	509
4. Operation of Present Method of Wage Payment	510
Payment "by the minute"	510
Effects of this policy	510
5. Annual Incomes	511
Wage losses	511
Comparison of differences between numbers employed and wages paid	512
Per cent of possible earnings received	513
Individual losses	514
Overtime does not make up losses due to undertime	514
6. Dovetailing	515
Coincidence of slack seasons in many industries	516
Overlapping of busy seasons	516
Differences in kind of skill required	519
7. The Labor Force	519
Classes of workers	520
The so-called steady workers	520
Workers temporarily employed	521
Seasonal employment	521
Shifting	522
The surplus pool of labor and irregular employment	523
Advantages of elimination of surplus pool	523
Industrial training	524
Provision for seasonal work	524
Summary and conclusion	525
II. Statistical Analysis of Industries Employing Large Numbers of Women in which Employment is Irregular	527
Paper Boxes	527
Introduction	527
General statistics	527
Seasonal variations	528
Statistics of irregular employment	531

	PAGE
Shifting	533
Variation in earnings	535
Overtime earnings	542
Summary	545
Confectionery	546
Introduction	546
General statistics	546
Seasonal variations	547
Statistics of irregular employment	548
Shifting	553
Variation in earnings	556
Overtime earnings	568
Summary	568
Clothing	570
Introduction — Unemployment of union members	570
Men's clothing	571
General statistics	571
Seasonal variations	572
Statistics of irregular employment	574
Shifting	577
Variation in earnings	578
Women's clothing	579
General statistics	579
Seasonal variations	579
Statistics of irregular employment	580
Summary	582
Shirt-making	585
General statistics	585
Statistics of irregular employment	585
The minor needle trades	590
Introduction	590
Men's furnishings	590
Vest-making	590
Dress-making	591
Millinery	592
Artificial flower-making	596
Straw-sewing	597
French edge-work	597
Fur and felt hats	597
Summary	597
Book-binding	599
General statistics	599
Seasonal variations	599
Statistics of irregular employment	600
Variation in earnings	603
Summary	604
Salesgirls	605
General statistics	605
Seasonal variations	605
Statistics of irregular employment	605

	PAGE
Shifting.....	609
Special problems.....	612
Alteration hands — "Specials" — Pay for overtime.....	612
Summary.....	613
Laundries.....	614
General statistics.....	614
Seasonal variations.....	614
Statistics of irregular employment.....	615
Shifting.....	615
Variation in earnings.....	618
Summary.....	621
Canning and preserving.....	622
Miscellaneous industries.....	624
Introduction.....	624
Awnings.....	624
Buttons.....	625
Brushes.....	626
Dyeing and cleaning.....	627
Glass.....	627
Paint.....	628
Paper bags.....	628
Tanneries.....	628
Tin cans.....	629
Tobacco.....	629
III. Analysis of Minimum Wage Awards Issued to January 1, 1915.....	630
IV. Proposed Measure to Insure a Steady Income.....	633

THE RELATION OF IRREGULAR EMPLOYMENT TO THE LIVING WAGE FOR WOMEN

I. INTRODUCTORY SUMMARY

STATEMENT OF THE PROBLEM

In the discussion of the legal minimum wage for women, provided for by nine states in 1912 and 1913, practically all of the emphasis thus far has been placed upon only one of the two essential factors, namely the *rate of pay*. Almost no attention has been given to the other equally important factor, namely the *regularity of employment*. Both factors must be taken into consideration if the working woman is to receive a "living wage."

All minimum wage rates so far established in this country have been weekly rates based upon the necessary cost of living per week. Such wage awards therefore really set rates per hour. In effect they say, "You may have a living wage for each hour you work, but if you have no work you must get along the best you can." For the awards make no allowance for short time employment. To establish rates which will take unemployment into account is admittedly a difficult problem. But in at least one country this need has been recognized and effectively dealt with.

Mr. Justice Higgins of the Australian Commonwealth Arbitration Court recently had before him a case involving a minimum wage for dock and wharf laborers. He refused to consider the loosely made statements concerning weekly wages and took as his basis for discussion annual earnings. The Justice said "The vital facts of the position are that the work is casual and uncertain, that jobs are short and that the necessities of the man and his dependents are certain, continuous and incessant. There is nearly every day a surplus of men seeking employment at most wharves. * * * It is lamentable that so many lusty men, in the prime of life, should have to stand about idle wait-

ing for jobs. The frequent bouts of idleness must often lead to bad habits, and to loss of muscular condition. There is a tremendous waste of potential human energy involved. The men serve the public by waiting for ships, and they are entitled at least to food, clothes, and shelter for themselves and dependents during the whole time of this service. If people expect cabmen to be ready for a call on the stand, they must pay an extra rate to cover the time lost in waiting. It would be absurd to say, as has been urged here, that the obligation of the master ceases with the actual physical exertion, for 'they also serve who only stand and wait.' "

The justice found that the men got about 30 hours of work per week taking slack and busy seasons together. The minimum cost of living was found to be 51s. a week; at 1s. 9d. an hour for 30 hours a man would receive 52s. 6d. per week. The rate therefore of 1s. 9d. per hour was fixed upon with time and a half for overtime. This reward is provisional and can be revised as soon as the employers "set their house in order" and devise some means whereby more steady work will be provided.

The need of correlating a wage award with the number of hours during which work can reasonably be expected has been recognized by a few English writers, also. Mrs. Hubback writing in the *New Statesman* for February 21, 1914 (Supplement p. 111) says "rates, whether time or piece, mean nothing till we know the average received during the year." In the same journal for June 6, 1914 (p. 264) it is stated that if the employers refuse to change their system of employment¹ they "must be compelled, by the extension of the Trade Boards Act or by some other administrative machinery to pay a rate of wages which will assure to all * * * whose services are required at one time or another a rate of wages indubitably sufficient to provide a tolerable living wage." Again and again when legislation has been proposed which would interfere with the "individual freedom" of the employer the cry has been raised that if we interfere with industry we are injuring the workman since he is dependent on the industry for his livelihood. In brief "we will take care of our workmen." But what becomes of the employer's

¹ See also, p. 524.

responsibility for his employees when orders for his wares are irregular or times are bad? It appears that some employers at least feel responsible only when it is convenient or profitable for them, for at other times we read "factory closed indefinitely," or "mills now running half time" or "10,000 workers laid off."

The importance of regular work has also been recognized in America. The Massachusetts Commission of 1911 said "Regularity of employment is as vital to the worker as a living wage. It presents another problem but yet one inextricably bound up with the question of what wages are necessary to maintain the employees of any given industry."¹ The Massachusetts Wage Board for the brush industry also saw the need of something more than an hour rate. "Any minimum wage finding which stops with merely naming a minimum hourly rate merely looks well on paper, but accomplishes no actual result beyond a somewhat pale moral effect."²

It must be obvious, therefore, to all thoughtful students of the problem that if we seriously desire to secure for working women a living wage we must either (1) grant them a wage rate sufficiently high to cover periods of unavoidable unemployment or (2) devise some method whereby fairly steady employment will be supplied. Some system of unemployment insurance might also well be considered in this connection. The problem is a difficult one and invites the serious attention of those interested in the welfare of working women.

THE ECONOMIC HELPLESSNESS OF WOMEN

The position of women in respect to the problem of unemployment is one of peculiar helplessness. The entire industrial situation for them is beclouded by the tradition of their economic dependence. The right to a just and full compensation for one's labor regardless of questions of dependency is not yet universally accepted. Perhaps unconsciously the employer is influenced by this belief that women do not seriously desire permanent employment. He therefore frequently maintains toward female employees an attitude of irresponsibility. This belief is aggravated

¹ Report of the Massachusetts Commission on Minimum Wage Boards, 1912, p. 162.

² Massachusetts Minimum Wage Commission, Bulletin No. 3, p. 28.

by the fact that many working girls themselves look forward to marriage and withdrawal from industry within a few years and therefore do not have a strong incentive to strive for steady permanent work.

Irresponsibility on the part of both the employer and the employee is accentuated by the present unregulated system of employment found in most industrial establishments, and also by the very nature of women's work. In the first place it is very largely in seasonal trades, and in most of these we find a constant flux of workers, employed here or there for a few days or weeks and then passing on to the next job. In the confectionery and the paper box industries in New York City in 1913, for instance, the State Factory Investigating Commission says in its report, that three times as many people as the firms ordinarily employ at any one time, entered and left the industry during the year. This great shifting army is in no position to care for itself during periods of idleness by saving money, for wages in this unskilled group are notoriously low, and indeed there is ample evidence that but few working women receive wages sufficiently high to justify saving. Moreover, very few women belong to trade unions or benefit organizations of any sort. But even among the more highly skilled organized women the percentage of unemployment is very great, running in New York as high as 12 per cent. at the end of March, 1912, and 6 per cent. at the end of September, 1912.

Women workers, too, as a class are especially immobile. The majority of women workers are young and many of them live with their families. Numbers of the older women are struggling to support their children or to help in maintaining the family life. In any case, it is very difficult for them to move from town to town to secure work, and in the case of the younger girls, at least, it is obviously highly undesirable for them to leave the shelter and protection of their families. These peculiar disadvantages besetting the woman in industry make the problem of regular employment and a living wage an unusually serious and difficult one. Any solution must necessarily be preceded by a careful analysis and understanding of the real elements which go to make up this problem of assuring a real living wage to the woman worker who is not only poorly paid but is also irregularly employed.

KINDS OF IRREGULAR WORK

The problem of unemployment is so complex that one's impressions become almost kaleidoscopic. If the point of view is turned ever so little, behold, one has an entirely new picture to study and analyze. It is not the purpose of this report, however, to add new material on the extent of unemployment, but rather to analyze and present in more detail that special picture which shows the effect of irregular employment upon the income of women workers.

Irregular work is of several varieties. Most obvious is that complete loss of work occurring when an employee is dropped entirely from the pay-roll of an establishment. Such unemployment means the stopping of all income and the discouraging—often heartbreaking—task of searching for a new job. At other times the employees are only temporarily “laid off.” One department may be closed for a short time, or perhaps the entire establishment shuts down for a few days or weeks. Such periods of irregular work often extending over several months, are usually accompanied by a great deal of “short time” work—that is, employees may be retained on the pay-roll but have work for only a few hours a day with two or three days a week entirely unemployed. Thus a worker who averages \$7 or \$8 a week may earn during these months only \$4 or \$3 or even \$2 a week. Not only does this wage loss occur with piece workers but it affects with almost equal force, time workers. It is this “short time” work which plays havoc with the annual income of the steady worker and which is seldom, if ever, balanced by the short period of overtime work and increased earnings. For example, Katia, a skilled garment operative, had no work at all for two months and a half during the year. But out of the remaining nine months and a half she had only three months of full-time work. During the other six and a half months she never worked more than five days a week and sometimes as little as two days.

Again, firms sometimes make a practice of retaining as many of their workers as possible during the dull season but reducing the rate of pay in place of “laying off” the employees. Both short time and a lower rate of pay reduced earnings in the case of a rose-maker in an artificial flower establishment, cited by Miss Van Kleeck. This girl “who earned \$9 a week in the busy season

was employed through the dull summer months, but she worked only three days a week with half pay, except for an occasional week when more orders were received. Even then she was paid \$2 less than in the winter for a full week's work, a premium to the firm for not 'laying her off.' ”¹

It is apparent that the woman industrial worker loses for practically every moment when she is not employed, even though she is idle through no fault of her own. This unique method of wage payment for the factory girl is quite in contrast with methods of wage payment among other classes of workers. Salaried workers, for instance, such as stenographers, clerks, agents, social workers, teachers, are paid a certain amount for a given period of time, usually a year or sometimes a number of months, during which time there may be many idle hours without affecting the income. Even salesgirls, paid by the week, often have periods of idleness during a day for which they do not lose in wages. Still another varied group of workers, practically paid by the piece, includes public chauffeurs, cab drivers, waiters, most lawyers and physicians. Such workers are employed and paid for a specific job. But fortunately for them their prices are adjusted, not only to the degree of skill involved, but also to the fact that employment is not continuous. We often rebel at the high fee of the cab driver or the doctor, and fail to realize that in addition to skill we are paying for the unemployed time of the man or woman. In contrast with these classes of workers the factory girl is paid practically for only the minutes when she is working. Even in laundries where work is fairly steady, time clocks are being installed, the workers sent off if they finish a few minutes early and corresponding deductions from their wages made.²

So serious is the need of a steady income that even many of those who have received industrial training in certain lines of employment have been compelled to give up their chosen work for something that offered a more steady income. Miss Oden-
crantz writing in the Survey for May 1, 1909, (p. 202) states that one-quarter of 420 girls who had graduated from a trade school had left the trades for which they were trained because

¹ "Artificial Flower Makers," Mary Van Kleeck, p. 43.

² Report of the Massachusetts Commission on Minimum Wage Boards, 1912, p. 155.

their employment was too irregular, and turned to others whose only common element was that of greater steadiness of employment. For instance, Elizabeth and her sister Emily made children's dresses for several years. In busy times they could earn from \$6 to \$9 a week, but when the slack season came they made only \$3 or \$4 and wasted much time waiting for work. They were usually laid off after Christmas for about three weeks and for several months in the summer. Since the mother was a widow and it was necessary for the girls to keep up the home, both finally turned to telephone operating, where each has steady work at \$7 a week. Elizabeth said: "Dressmaking is a nice trade, and may be all right for other girls, but I have to support myself and make more than pin money. I can't afford to stay home three or four months every year."

In brief, then, we demand that the factory girl be on hand the moment she is "wanted," but the time she wastes waiting to be "wanted" is usually not cared for in any way nor are any steps taken as a rule to reduce this waiting period to a minimum. This unjust and unsocial policy tells its story in the anaemic and under-nourished girl, the tubercular girl, the criminal girl and at times in the girl "gone wrong."

ANNUAL INCOMES

This study of the actual incomes of working women brings out clearly the indisputable fact that "rate of pay" is but little indication of income. And this applies not alone to those younger "irregular" workers as yet unskilled and undisciplined who suffer from lack of work and low earnings, but it is found that for trained and experienced workers also, the actual income falls from 10 per cent. to 20 per cent. below the possible income based on "rate of pay." It is practically impossible for the usual official statistics of "days in operation yearly" or "average number employed by months" to reveal this situation, but it is clearly seen in the more intensive investigations, particularly when the total numbers employed each month are compared with the total amounts paid out in wages each month. The totals for each week bring out the contrast even more clearly. In the paper box industry in New York City, during the year beginning November, 1912, the difference between the largest and smallest num-

bers employed each month was only 8 per cent., but this rose to 12 per cent. when weekly totals were compared. In contrast with this is the difference between the largest and smallest amounts paid out in wages. The difference in monthly wage totals was 15 per cent., but this rose to 30 per cent. when weekly totals were compared. While, therefore, the numbers employed varied only 12 per cent. from the busiest to the slackest week, the weekly wage totals varied 30 per cent., indicating that while many employees were kept on the pay-roll their wages, through short-time work, were being reduced very much below normal. In the making of women's clothing in New York City the difference in the average numbers employed in 1912 by months was 46 per cent., while the monthly wage variations rose to 60 per cent. In the confectionery industry in New York, during the year beginning September, 1912, the greatest weekly variation in numbers was 25 per cent., whereas the corresponding variation in wages was 35 per cent.

Comparisons between actual and possible earnings, based on average weekly earnings and rate of pay, reinforce these facts. In the paper box industry in New York City, 94 per cent. of a selected group of 246 women working under conditions above the average earned less than their scheduled rate of pay. Out of this 94 per cent., 62.1 per cent. fell more than 10 per cent. below their possible earnings for the period worked, and 41 per cent. fell more than 15 per cent. below. In the confectionery industry in a similarly selected group of 1,063 workers, 89.7 per cent. earned less than their scheduled rate of pay. Out of this 89.7 per cent., 63.4 per cent. fell more than 10 per cent. below their possible earnings for the period worked, and 44.6 per cent. fell more than 15 per cent. below. The average loss in actual earnings compared with rates for both groups was approximately 15 per cent.

An investigation by the Connecticut Commission on the Conditions of Wage-Earning Women and Minors¹ showed that for 942 females in the cotton industry the computed full time earnings were \$9.17 while the average actual weekly earnings were only \$8.05, a loss of 13.9 per cent.; in the silk industry for 1,175 females the corresponding figures were \$7.40 and \$6.26, a loss of

¹ Report of Feb. 4, 1913, pp. 67, 91, 153, 171, 200.

18.2 per cent.; in brass factories for 662 females, the figures were \$7.87 and \$6.89, a loss of 14.3 per cent.; in the hardware industry for 701 females the figures were \$6.79 and \$5.95, a loss of 14.1 per cent.; in the metal trades for 2,541 females the figures were \$7.41 and \$6.50, a loss of 13.9 per cent. These results are taken from 50 factories in 14 localities, and the average actual weekly hours worked were 51 for all the industries except silk where the average hours were 50 per week, full time for most of these establishments being the legal 58 hours per week.

For the year 1913 the Wisconsin State Federation of Labor reported that among organized women workers, where one would expect to find relatively good conditions, the possible annual earnings averaged \$483, while actual earnings fell to \$429, a loss of 11.2 per cent. For all union garment workers including many women, the average loss was 15.7 per cent. Losses among unorganized workers would unquestionably be higher.

In her study on "The Living Wage for Women Workers," Miss Bosworth found that the factory workers she studied had an average yearly income of "nominally" \$406.99. But they lost an average of nearly 13 per cent. from "slack work and no work," or \$52.38, reducing their average annual income in this way to \$354.61. Miss Bosworth therefore concluded that "the nominal rate is from 4 per cent. to 14 per cent. above the actual earnings." However, this is an average for all trades; for those where considerable irregularity exists investigations show that at least 15 per cent. should be added to any wage rate in order to cover losses from short-time work. The alternative to this would be, of course, to make employment more regular and to consider some form of unemployment insurance.

From the point of view of material values in dollars and cents, perhaps, the usual official wage statistics of "averages" may be of value. But for the human being who must have clothing, shelter and a certain amount of food, if not the proverbial three square meals each day, the average wage or average loss of any group of workers has but little more meaning than "rate of pay." While group averages show wage losses of about 15 per cent., yet when the wages of individual girls are taken out of the statistical

mass, we frequently find variations for the time they are on the payroll, of 75 per cent. between the largest and smallest amounts received each week, with losses from possible earnings running as high as 35 per cent. Take the story of Tina, for instance. Tina was a machine operator in a clothing factory. During the busy seasons, her weekly wage averaged \$7 or \$8 a week. But in order to come up to this level she had to work overtime till 8 o'clock in the evening for two or three nights a week during the height of the season. And work was so dull in the other half of the year, that her average weekly wage then fell to \$3 or \$3.50 a week and her total income for the year was only about \$262.¹ She lost during the year about a third of her full-time wage. Well may such a girl ask, "What do I care if I average \$6.12 a week for the year. If I have to live for seven or eight weeks in January, February or March on \$4 or \$3, or even \$2 a week, with now and then nothing at all, how is it going to help me if I earn \$8 or \$10 for four or five weeks next November or December?" From the point of view of a living wage for the individual a certain steady income must be assured each week. With wages for the great majority too low to permit a margin for saving it otherwise becomes impossible for a worker to plan wisely or to maintain her standard of self respect or efficiency.

OVERTIME

The facts invariably discovered in every industry make it impossible for anyone to say "Well, after all they make as much by overtime work in the rush season as they lose in dull times." In the first place, the amount of overtime is far less in actual hours than the amount of slack time; and what overtime there is, is not worked by the entire force. For example, only a third of the women employed in decorating glass worked any overtime at all, according to the federal investigation of 1907-8. The overtime worked by this minority of the employees occurred an average of thirteen times and was most often of two to four hours duration. Some forty hours of overtime yearly worked by a third of the women cannot bring in a return which will

¹ "Making Both Ends Meet," Sue Ainslee Clark and Edith Wyatt, p. 121.

make up for the entire closing of many glass factories during the two summer months—a sixth of the year. Then often there is no extra payment for the overtime of time workers. Salesgirls, for example, seldom get anything extra except “supper money.” Three-fifths of the Washington, D. C., factory girls, a government investigation in 1911 showed, were not paid for their after-hours work. Again the output of piece workers is very likely to fall off relatively, because they grow so tired during the long hours, that their gains are much less proportionally than their length of time at work would indicate.

An instance of this last fact is a computation of the hourly wages of three piece-workers in a Milwaukee tannery. The women were paid bi-monthly, and their regular working hours during each fortnight were 120. One earned 18 cents an hour working full time, while working over time her hourly earnings fell as low as 12 cents. The hourly earnings of the second were reduced from 20 cents as low as 8 cents when she worked overtime and the third suffered a reduction of hourly earnings from 15½ cents to about 10½ cents under the same conditions.¹

In the Boston study of factory girls' budgets, previously referred to,² it was found that they lost nearly 13 per cent. on account of industrial conditions. They gained less than 1 per cent. from overtime, only \$3.76, while they lost an average of \$52.38, yearly. But the serious evils of overtime work are too well known to justify any fair minded person in countenancing long hours as a possible means of making up wage losses due to under-employment.

DOVETAILING

Just how extensive is the opportunity for a woman thrown out of work in one trade to find employment quickly in another is a matter on which there is but little reliable information. As an index of conditions, however, a comparison has been made, of the numbers employed by months in New York City and “up-state” for the various industries for which such information was

¹ “Women Workers in Milwaukee Tanneries,” Irene Osgood, in Report of Wisconsin Bureau of Labor Statistics, 1907-8, Part VII, p. 1058.

² “The Living Wage for Women Workers,” M. Louise Bosworth, pp. 3-340.

available. (See Charts I and II.) Generally speaking, it may be seen that the busy seasons either coincide or overlap sufficiently to make anything like complete dovetailing an utter impossibility. In almost all of them there are two busy seasons coming in the spring and fall and two dull seasons, one after Christmas and the other in the summer. There are differences in the degree to which the numbers fluctuate, but variations follow the same general course except in the manufacture of shirts in New York City. There the fall busy season occurs as in other trades, but spring is the dulllest time and the summer is active. But since the busiest season in shirt making comes in the late fall along with that of all the other industries, it would be impossible for unemployed operatives of other trades to turn to shirt-making during their slack summer period without displacing regular employees whose services would be needed later on, when the former had returned to their usual work.

An example of the difficulties of overlapping of the seasons in various industries, was brought out through efforts made in Boston a few years ago to find work for milliners during the summer dull season. Places were found for them doing film developing, in which the largest number of workers are needed during the summer. But, in order to get positions, the girls had to agree to remain till October 1st, whereas they were needed in millinery by the first of September. A similar effort was made to dovetail their work with that of rebinding old books, which is another summer occupation, but here again the season overlaps about a month with that of millinery.

Any successful system of dovetailing employments, moreover, would at best benefit only those workers who lose their places entirely, and would be of no help when short hours were worked or a few days lost at irregular intervals, as happens so frequently. The only valid conclusion on the question seems to be that drawn by the Massachusetts Commission on Minimum Wage Boards, in 1911,¹ which said, after careful investigation, "No worker can count on casual work or a supplementary job to fill in the time lost by industrial causes."

¹ Report of the Massachusetts Commission on Minimum Wage Boards, 1912, p. 162.

CHART I
NEW YORK CITY
AVERAGE NUMBER EMPLOYED BY MONTHS

(MAXIMUM = 100%)

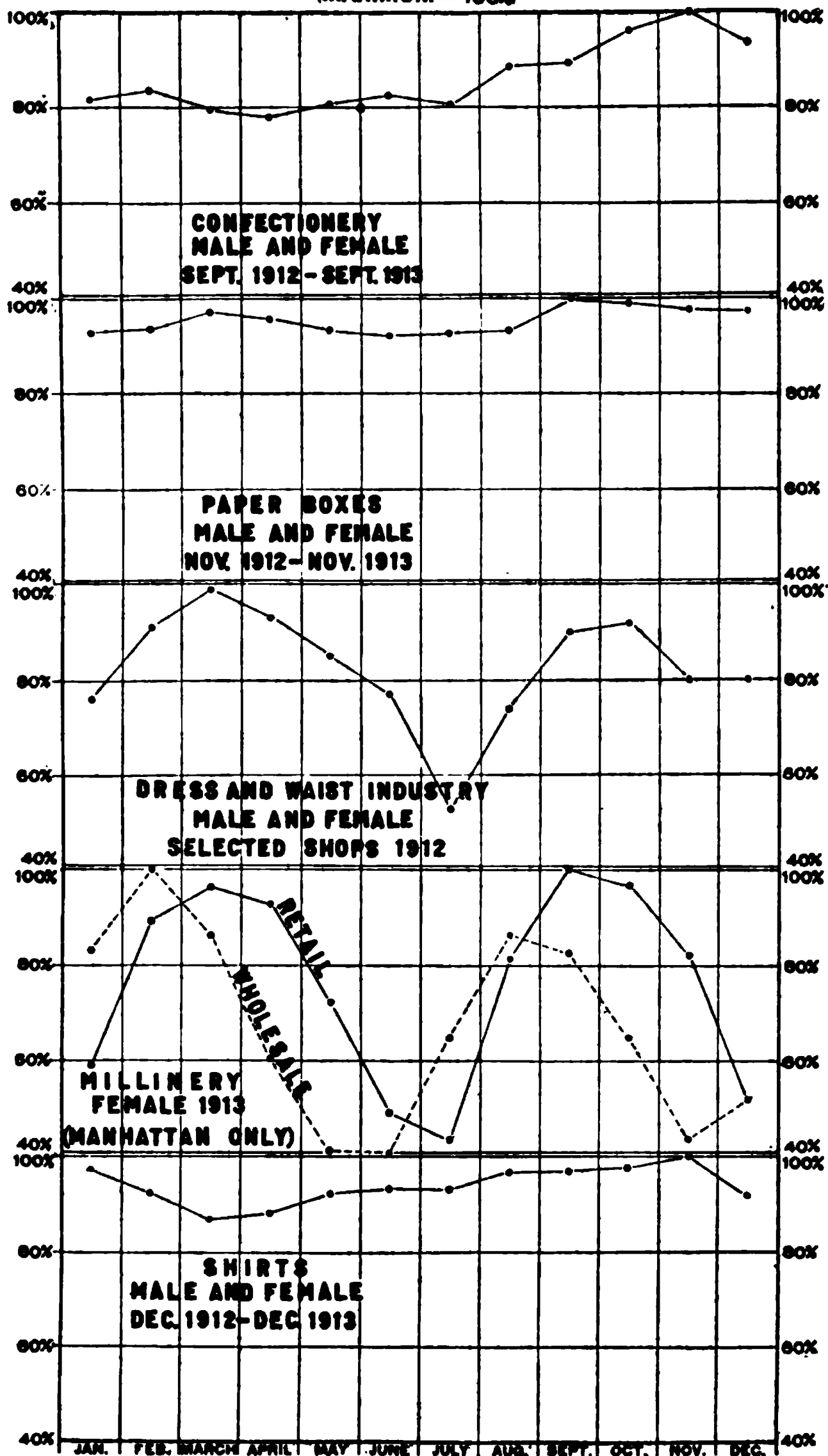
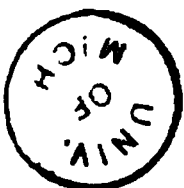
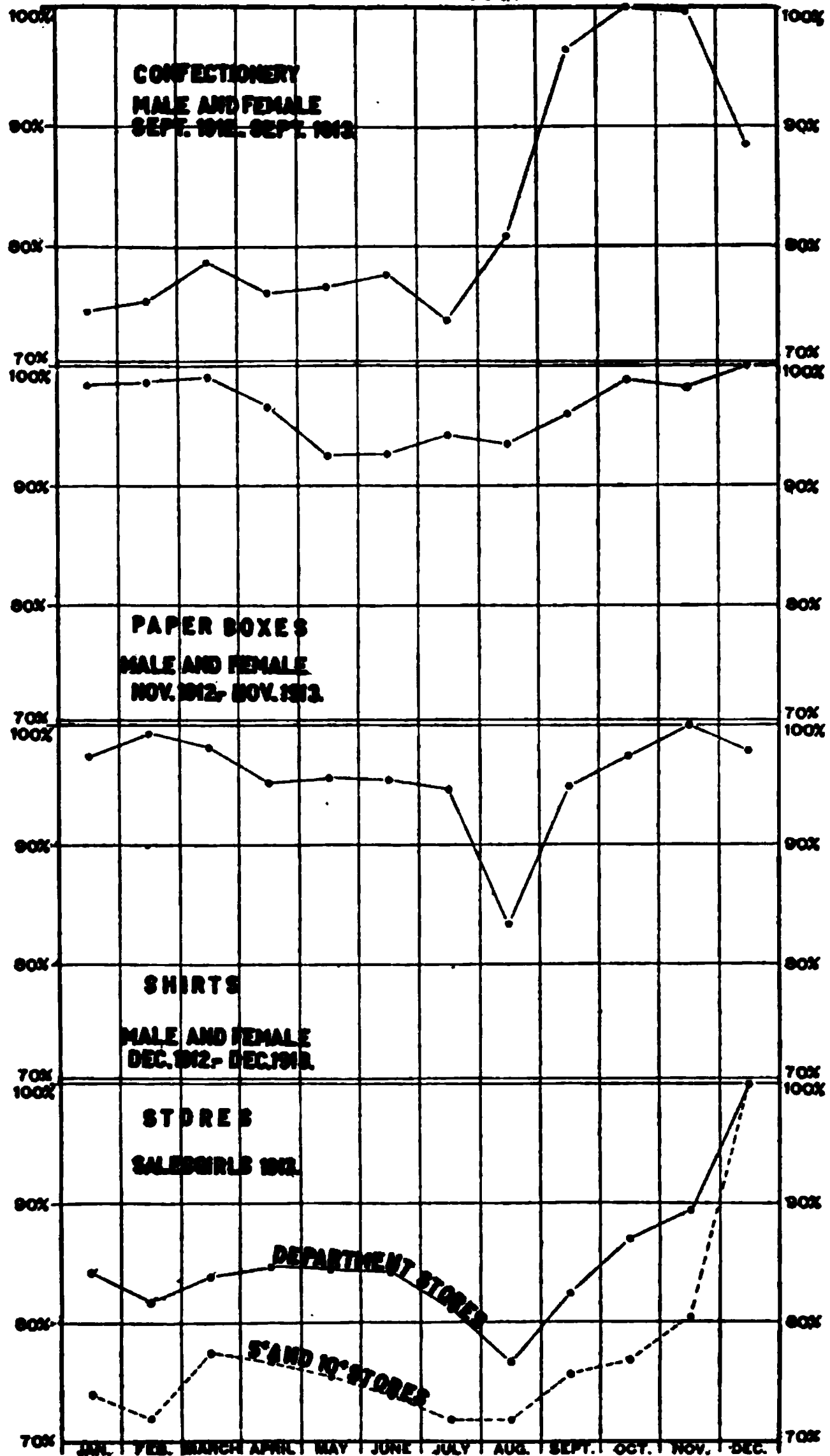


CHART II **NEW YORK, UPSTATE** **AVERAGE NUMBER EMPLOYED BY MONTHS**

(MAXIMUM = 100%)



In addition to this "time" difficulty a worker has also to consider the kind of work to be done. If she has acquired any skill or experience in a particular line she may not be able to turn indiscriminately to an entirely different kind of work. Such a change of occupation may mean loss of skill—for skill to-day is usually experience and speed in one particular motion or set of motions and tends to disappear if interrupted. Among the many other evils besetting the girl trying to piece out a year's work will be found a lowering of the wage standard, breaking down of habits of regularity thus tending to inefficiency, and a lowering of self confidence resulting in a loss of economic bargaining power. It is during these periods of searching for work that temptation to immorality becomes strong. A vivid picture of the human meaning of job-hunting was given in a Chicago paper during the summer of 1913: "For the last ten days I have been going to the loop every day to look for work. I am there at eight o'clock in the morning. I look for work until eleven. From eleven to twelve is the lunch period in most big establishments and it is useless to try to see anybody at that time. My lunch in a cafeteria gives me a rest of fifteen or twenty minutes. Then I am back again on the sidewalk. The chase from building to building during the morning and the constant dodging of automobiles tire me. Is there a place where I can go to rest?" Another girl summed up the situation as follows: "Yes, I get the papers right away in the morning, but when you come to the place there are always so many others waiting, and then it is too late to go to any other place. Sometimes the man takes your name and says he will let you know in a couple of days. You wait, but you don't hear a word from him. Half the time he doesn't want anybody. I just hate to look for work. You always feel kind of upset like, and don't feel like doing anything at home."¹

THE LABOR FORCE.

To those familiar with industrial conditions it has become a commonplace to see large groups of workers, particularly women and children, suddenly "laid off" at certain periods of the year.

¹ Survey, May 1, 1909, p. 210.

The Christmas "lay off" in department stores and the confectionery industry, the summer "dull seasons" in the garment trades, and the dismissal of milliners after the "season" is over present a familiar spectacle. This condition has been illustrated by facts, figures, charts, curves, diagrams and tables — all of which have commanded respectful attention. But the real problem is, who is at fault? How many are thus affected? How seriously do they suffer? What shall be done about them?

In the analysis of the situation as to the irregular employment of women there appear three main classes of workers fairly well defined.

1. The smaller group of those permanently employed, forming the backbone of the labor force.

2. Those who are employed for the entire busy season, but are laid off at its close.

3. Those who drift in and out of the industry working only a few days or weeks at a time in one place.

In most industrial establishments there exists that smaller class of employees (group 1) consisting of the more skilled and permanent workers, permanent in the sense that they remain on the payroll for at least a year. They are the older more responsible workers who are more frequently entirely dependent upon their earnings, often with relatives or families dependent upon them, and are more likely to be employed at the higher rates of wages. Nominally this class of employees is referred to as "steady" workers but from the point of view of earnings we have seen that even these workers suffer large wage losses due to slack work in the dull season.

The second group of workers consists of those who for various reasons are dropped from the payroll from the time the dull season begins until the arrival of the busy season. In some lines of work such as confectionery and department stores a very large "lay off" occurs immediately after Christmas. In other kinds of work, as in paper boxes, the "lay off" is more gradual. There are undoubtedly a few employees, some of them perhaps married, who plan to go into the industry only during the busy season in order to supplement the family income, perhaps for personal

reasons or more likely to tide the family over a financial depression due to sickness or unemployment of the male breadwinner. But the larger group consists of responsible, steady women, many of them entirely dependent on their own resources, others with families depending upon them. These are the workers who suffer most by enforced periods of unemployment.

On the other hand there are undoubtedly in this class, also, large numbers of girls to whom a "lay off" is not a serious problem — girls who are partly or entirely supported by parents or relatives and who have not yet felt the necessity of steady permanent work. This class of workers merges into the last group (3) and the two together form one of the most serious obstacles to the responsible worker seeking to earn a living wage.

This third group of workers consists of those who are constantly shifting in and out of the industry staying only a few days or weeks in one place. The existence of this last group is made clear by a study of almost any payroll; for it is almost universally true that, during the course of a year, for one position, a succession of persons are hired and discharged, or leave for some reason. The State Factory Commission's investigation in New York City showed that in the confectionery industry 45 per cent., and in the paper-box industry, 40 per cent., stayed four weeks or less in the same factory. Miss Van Kleeck showed that in millinery 52 per cent. stayed only eight weeks or less. In the manufacture of men's clothing, a more steady trade, an investigation of conditions in the five leading cities in the trade, 1907-8, showed that 28 per cent. of the women worked less than five weeks in the same place. Among salesgirls the conditions are similar. In a large Boston store 20.8 per cent. remained less than five weeks, while a Washington, D. C., investigation showed that 25 per cent. remained three months or less.

The following table giving the experience of the seven largest department stores in New York city for 1913 shows a like enormous flux of employees constantly passing through their doors. With a single exception, the number of changes is greater than the average number employed.

TABLE 1
RETAIL STORES, NEW YORK CITY, 1913
NUMBER OF EMPLOYEES IN THE SEVEN LARGEST ESTABLISHMENTS
 (New York State Factory Investigating Commission)

Average number employed	Number added during the year	Number dropped or leaving during the year
5,000	5,500	.....
4,296	5,979	5,950
4,272	6,809	6,712
3,750	12,159	10,382
3,500	8,155	8,750
3,497	875	940
2,313	2,967	2,539

In laundries, too, a very great shifting of workers is constantly taking place. One Massachusetts establishment reported that 57 per cent. remained less than three months; another that 76 per cent. remained less than three months; while a Washington employer stated that "60 to 90 days eliminates a crew completely."

These three classes are of course not defined by hard and fast lines. They merge into one another and workers are constantly passing from one class to another. Frequently bad industrial conditions will throw steady workers back into the casual labor class.

In the women employing industries, therefore, it is apparent that there are large numbers of young girls, many of whom have not yet reached the years of responsibility, who are not entirely dependent upon their own earnings for support and who expect to be in industry for only a short time. For this class of worker employment is largely the result of preference or custom being to some extent a matter of pin-money and often looked upon as a means of release from monotonous home duties to be replaced by social enjoyment and the companionship of friends. Were it not for the tragic effect which the presence of this proportionally small group of workers has upon the mass of women employees we might pass them by unnoticed. But in this very group lies the key to not a little of the distress of the larger more responsible group.

It is this great throng of young, untrained, undisciplined workers which supplies the employer with help for the few busy months.

At other times they drift in and out, from establishment to establishment or from trade to trade, taking positions at whatever they can get, keeping out the older girls who are accustomed to a slightly higher wage, and cutting down the income of the steady responsible worker. Because this class of casuals is ever present the employer finds it easier to take them as they come and any question of regularizing his business is passed by. In this way they increase the discontinuous employment of the steady worker, and tend to make permanent a disorganized labor market.

The employer, too, has frequently complained of the irresponsibility of these workers. On this point one Massachusetts employer said, "the result of a big seasonal demand for female labor like this means that during the dull time of the year the girls we discharge at Christmas drift into other lines of employment, consequently, when our biggest demand comes, from September to December, we are compelled to again teach many inexperienced girls. The small output and loss through spoilage of the inexperienced girls make them undesirable help. In many cases, even at a small rate of pay, they increase the labor cost on the goods materially." Of these "only a small percentage become of any value as actual producers. Of a lot of say 50 girls hired on Monday morning we will often lose or discharge 25 of them before the end of the week. Before the end of the second week the lot will sometimes be reduced to 10."¹ Another Massachusetts employer, speaking of the "heedlessness, irresponsibility, and lack of ambition" found in such young workers, declared that, because he had to employ so many of them, "the problem of candy making is the labor question."² In short, the presence of this class of workers is one of the main causes for the existing disorganization of industrial employment. Moreover, most of their employment is at work which neither trains them nor offers them the opportunity of any great advancement. Their presence in industry cannot be justified from any social point of view.

Before we can hope, therefore, to handle effectively the problem of regular employment and a real living wage for the older and needy worker, and, as a first step toward the better organization

¹ Massachusetts Commission on Minimum Wage Boards, 1912, p. 66.

² Ibid., p. 53.

of industry, particular attention must be given to this special class of workers.

The first step toward such a program obviously would be to reduce the supply of this untrained and irresponsible group by partially shutting them out of industry for a period of time. The present age of admission to industry in several states is sixteen years. By extending this limitation to all states and extending this controlled period possibly up to the age of eighteen a great mass of casual labor would at once be removed, and would leave the field open for older and more responsible workers. During these years attention could be given to the proper physical and educational training of young women. With the increased emphasis that is being placed upon industrial education, this period might well be devoted to a combination of technical and general training, together with practical experience in shop work. For it will probably always be true that, due to changing seasons and emergency demands, many industries will need for certain short periods of time extra help. By supplying this demand as far as possible from the group of young women, practical shop training would be secured and, in addition, the wages earned would aid in relieving economic pressure. The extent of actual factory work should be limited to certain periods at the discretion of the educational authorities, and the actual placing in establishments should be made through the medium of the Labor Exchanges. The close of the busy season would then find the workers returning to the training school instead of drifting from place to place and from job to job as at present.

In this way the necessary surplus pool of labor would be utilized to the best advantage of all concerned. Such physical and industrial training would better prepare young women for a useful, efficient life, and at the same time would leave a more open field of employment with more regular work at higher wages for the older responsible workers. There should be no difficulty in securing the cooperation of the employer in such a plan, since for many years his constant complaint has been the untrained, careless and irresponsible character of so large a part of the labor force. In but few cases, however, has there been sufficient pressure upon

the employer, or initiative on his part, to cause him to change his present haphazard system of employment. For the more steady workers who nevertheless suffer periods of unemployment, some form of unemployment insurance should be considered. By this method the wage losses would be distributed, in part at least, between all parties concerned instead of, as at present, allowing them to fall entirely upon the worker, the person least able to bear them.

SUMMARY AND CONCLUSION

All facts agree that actual earnings fall far short of possible earnings based upon "rate of pay." This investigation leads also to the conclusion that, at least for the workers here considered, the average girl or woman loses in wages an amount equal to no less than 15 per cent. of her possible earnings. The younger more irregular worker loses an even greater amount.

In addition, the investigation shows that very many of the women in seasonal trades cannot find work at the same place for the entire year, while in many trades, from a quarter to one-half remain in one place only three months or less. A striking illustration of the constant flux of workers in and out of different establishments was found by the Factory Investigating Commission in the records of one large New York City department store. which hired over 12,000 employees in order to maintain an average permanent force of a little over 3,000. In ten confectionery establishments 3,138 were employed to maintain an average force of 953 people. In nine paper-box establishments 1,657 were employed to maintain an average force of 792 workers. This same shifting is found everywhere in varying degrees.

It must be quite obvious, therefore, that a living income is dependent not only upon a reasonable daily or weekly wage but also upon reasonable regularity of employment. This latter problem presents many difficulties, particularly with industry disorganized as at present. With such large surplus pools of labor to draw from only the few more farsighted employers will initiate reforms in their systems of employment. Moreover, the members of this surplus pool are obtaining practically no training nor are they

receiving anything approaching a living wage. But by withdrawing them from the labor market, except for short periods during the "busy season," the much needed special training can be supplied and positions will be left open for older responsible workers. Unless reasonable regularity of employment can be definitely assured, a living wage through the year can be secured only by setting up a wage rate sufficiently high to cover unemployed periods of time, or by establishing some form of unemployment insurance.

II. STATISTICAL ANALYSIS OF INDUSTRIES

THE PAPER BOX INDUSTRY

INTRODUCTION

Years ago, when we went to the grocery store to buy crackers, the grocer scooped them up out of a barrel and put them into a paper bag for us. Now we get them in a neat little paper box. More and more the grocer's shelves are filled with "package goods," which the housewife prefers because they are more likely to be fresh and free from germs and dust. Every Christmas sees a greater variety of fancy articles offered for sale in "ornamental holly boxes suitable for gifts." All our clothing, hats, and shoes are delivered to us boxed. The ubiquitous paper box serves as container for articles as different as cigarettes and writing paper, phonograph records and ice-cream, electric light bulbs and candy.

GENERAL STATISTICS

With such an increase in the use of paper boxes, it is not surprising that the last few years have witnessed a considerable development in the industry. According to the United States Census of Manufactures, the number of wage-earners of both sexes employed has increased from some 27,000 to nearly 40,000, a gain of over 48 per cent. in the ten years between 1899 and 1909. The manufacture of paper boxes is, moreover, one of the larger "women-employing" industries of the United States. In 1909 there was an average number of 23,724 women over 16 at work in paperbox establishments, as against 20,527 in 1904, and 18,192 in 1899, an increase of 30 per cent. in the decade, though during the same period the number of men increased 67 per cent. Although women at present form almost exactly three-fifths of the total number of wage earners in paper box making and are thus decidedly in the majority, yet the proportion of men is increasing, if very gradually. In 1880, women formed 70 per cent. of the entire labor force, 65 per cent. in 1899, and 60 per cent. in 1909.

This tendency toward displacement of the women workers may or may not continue, but remembering that the large majority of the 2,800 workers under 16 are girls, the statement still holds that paper box making is "woman's work."

New York employs by far the greater number of women workers in this industry, nearly 8,000; Pennsylvania follows with over 3,000; Massachusetts with 2,600, and Illinois with 2,400. In Ohio are found 1,500, in New Jersey nearly 1,400, and somewhat over 1,000 in Connecticut.¹ Nearly 6,000 more are scattered in smaller numbers over the remaining states.

Owing to its low wage level this industry is one frequently suggested for investigation by Minimum Wage Commissions. It is therefore especially important to study the effects of irregularity on wages in the industry, and to make a comparison of wage rates and actual earnings in order to see whether or not a minimum wage rate would really provide a paper box worker with a living wage.

SEASONAL VARIATIONS

The seasonal variations which exist in the paper box industry naturally depend on and precede variations in the demand for goods "put up in pasteboard." On that account, the work on some sorts of boxes, such as those for cigarettes and shoes, is reasonably steady. But, on the whole, the buying for clothing in the spring and fall and the Christmas demand for all sorts of fancy and candy boxes, makes the industry one of decided seasonal irregularity.

The busiest season comes in the fall, from Labor Day to Christmas, followed by an extremely dull season. The trade revives again for several weeks before Easter, for a shorter and less extreme rush season, produced mainly by the demands of the clothing trade. Then another slack period lasts well through the summer. During the rush times, more or less overtime is

¹ FANCY AND PAPER BOXES

Number of Women Over 16 Employed December 15, 1939

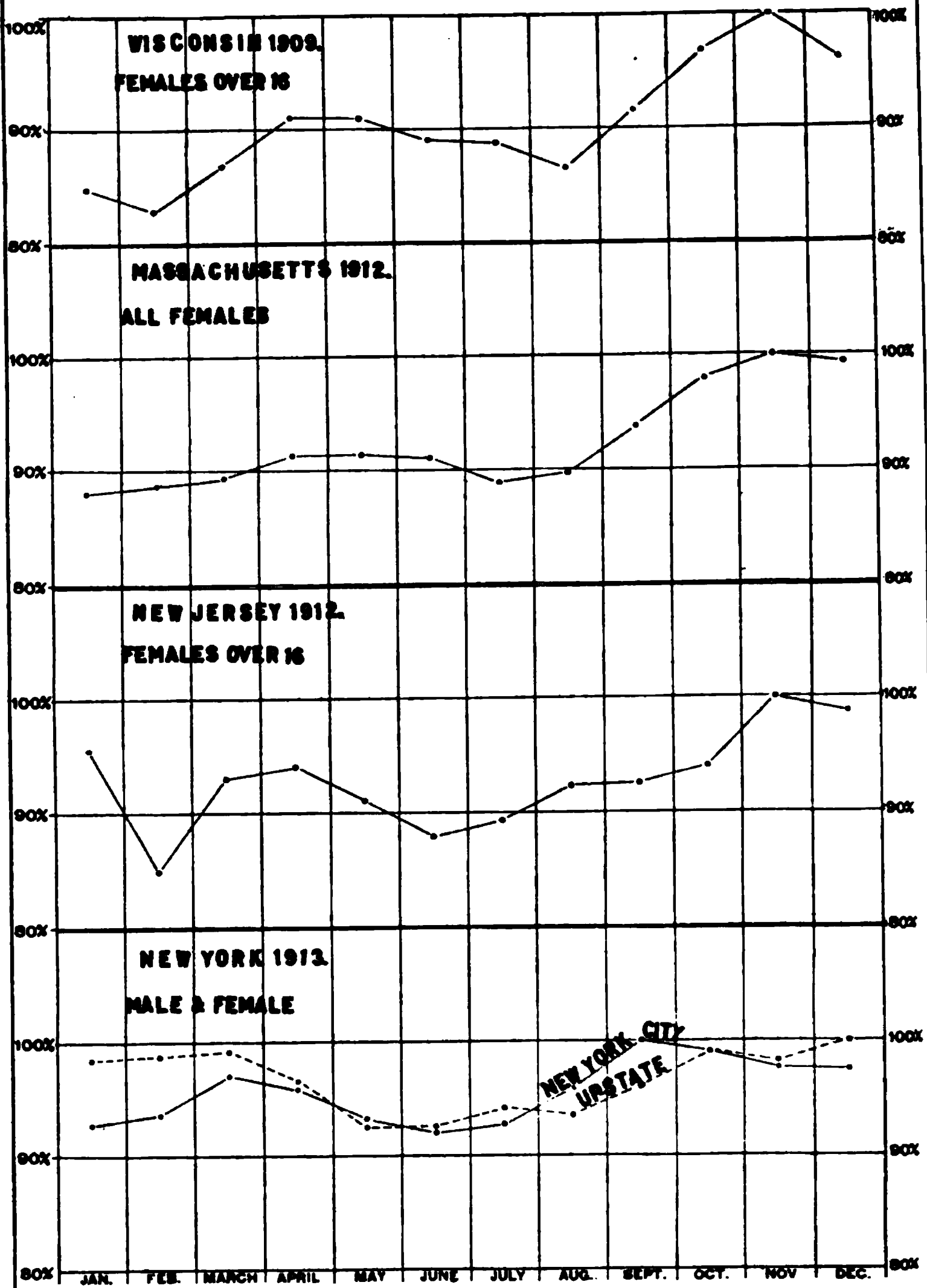
[United States Census of Manufactures, Vol. IX, Table II for each State]

New York.....	7,928	New Jersey.....	1,387
Pennsylvania.....	3,032	Connecticut.....	1,057
Massachusetts.....	2,629	Other States.....	5,932
Illinois.....	2,478		
Ohio.....	1,518	Total.....	25,961

worked in nearly every prosperous factory and Sunday work also is sometimes found. Most manufacturers believe this cannot be avoided, since orders come at short notice and paper boxes are too bulky in proportion to their values for profitable storage; the fire-hazard also is too great to risk making them for stock. The reverse of the two busy seasons is found in the dullness of the trade after Christmas and its still greater slackness in the summer. Here is the typical seasonal variation of so many of the industries where large numbers of women are found — very busy in the fall, dull after Christmas, busy in the spring and very dull in the summer.

Wherever data could be obtained, from Massachusetts to California, from Maryland to Oregon, and in the great industrial states of New York, New Jersey, Pennsylvania, Illinois and Wisconsin, a like alternation of rush seasons in the spring and fall with slack in the winter and summer was found. For instance, in Philadelphia an investigation of five firms in 1913 disclosed the fact that after Christmas they made wholesale dismissals to the extent of 24.3 per cent. of their force. In New York City last year the Factory Investigating Commission found that the number of employees rose to 6,700 just before Christmas and fell to 6,100 directly after that time. What this irregularity and loss of working time means to the women is well illustrated by the story of Rose, a Russian girl, twenty-three years old. Her family was still in Russia, so she had to look out for herself entirely. In five years she advanced in wages from \$3.50 to \$5.50 a week. But out of this meager sum she had to save enough to carry her over the slack season, and she was out of work fourteen weeks during the year. This made her average weekly earnings just \$4.02 — over 25 per cent. lower than her rate of wages. Even the girls nominally at work every week in the year for the same firm are found to suffer large reductions in wages on account of their short hours in the dull season. One girl received an average weekly wage of only \$6.14 instead of her regular rate of \$7.25, another \$8.27 in place of \$9.45, a third \$4.58, instead of \$5. These are examples taken quite at random. For a girl to average more than her rate is very unusual. These facts indicate the need for further study of the irregularity of the industry and its effect on wages,

CHART III
PAPER BOXES
AVERAGE NUMBER EMPLOYED BY MONTHS
(MAXIMUM = 1000)



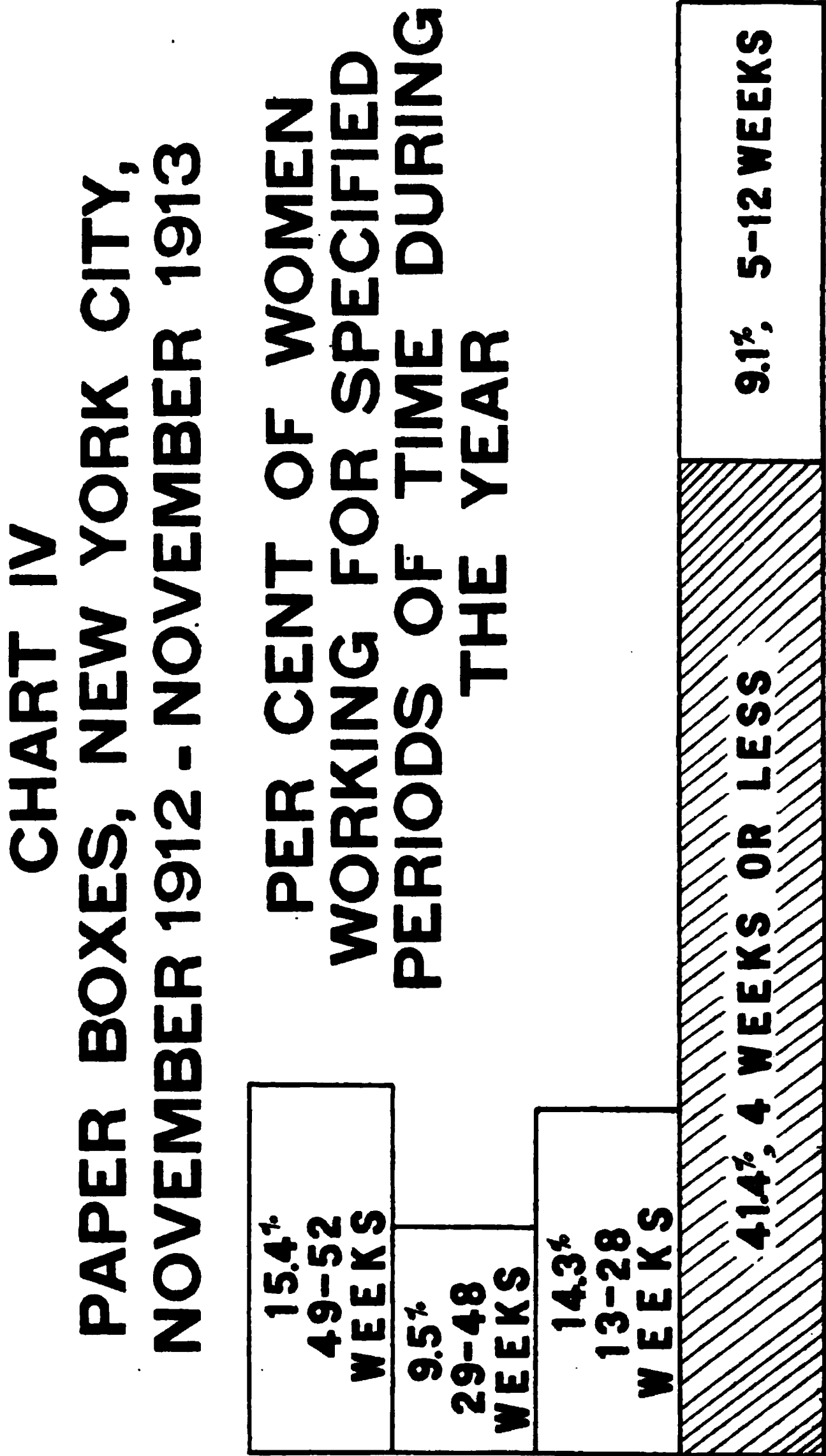
and they point toward the conclusion that greater regularity of employment as well as a minimum wage rate is needed to obtain for the steady, responsible, mature women workers a *living income*.

STATISTICS OF IRREGULAR EMPLOYMENT.

The statistics of irregularity most commonly found in state labor reports are from the point of view of the industry rather than that of the workers, and are those of "average number of days in operation yearly" and "average number employed by months." From published statistics on both of these points it does not appear that the manufacture of paper boxes is a particularly seasonal industry. For instance, out of a possible 305 working days yearly, Massachusetts factories were in operation 290 days, and New Jersey and Pennsylvania factories 292 days in 1912.

The statistics of the varying "number employed by months" during the year are also shown graphically in Chart III. The largest number in any one month is considered 100 per cent. and the per cent. for every other month reckoned with that as a base. The states for which this was obtainable and the latest years for which it is compiled, are Massachusetts in 1912, New Jersey in 1912 and Wisconsin in 1910. It will be seen that the curve for each state follows a similar course and brings out the fall rush with its peak in November, the lesser spring busy season, the short drop in January and the long dull period of the summer months. The situation in New York City and in the rest of the state in 1913, as found by the State Factory Investigating Commission, is also presented in this chart. From these figures the fluctuations do not appear to be extreme, since the difference between the largest and smallest number was only 12 per cent. in Massachusetts and New Jersey in 1912, 18 per cent. in Wisconsin in 1910, and 8 per cent. in New York for the year ending November 1913.

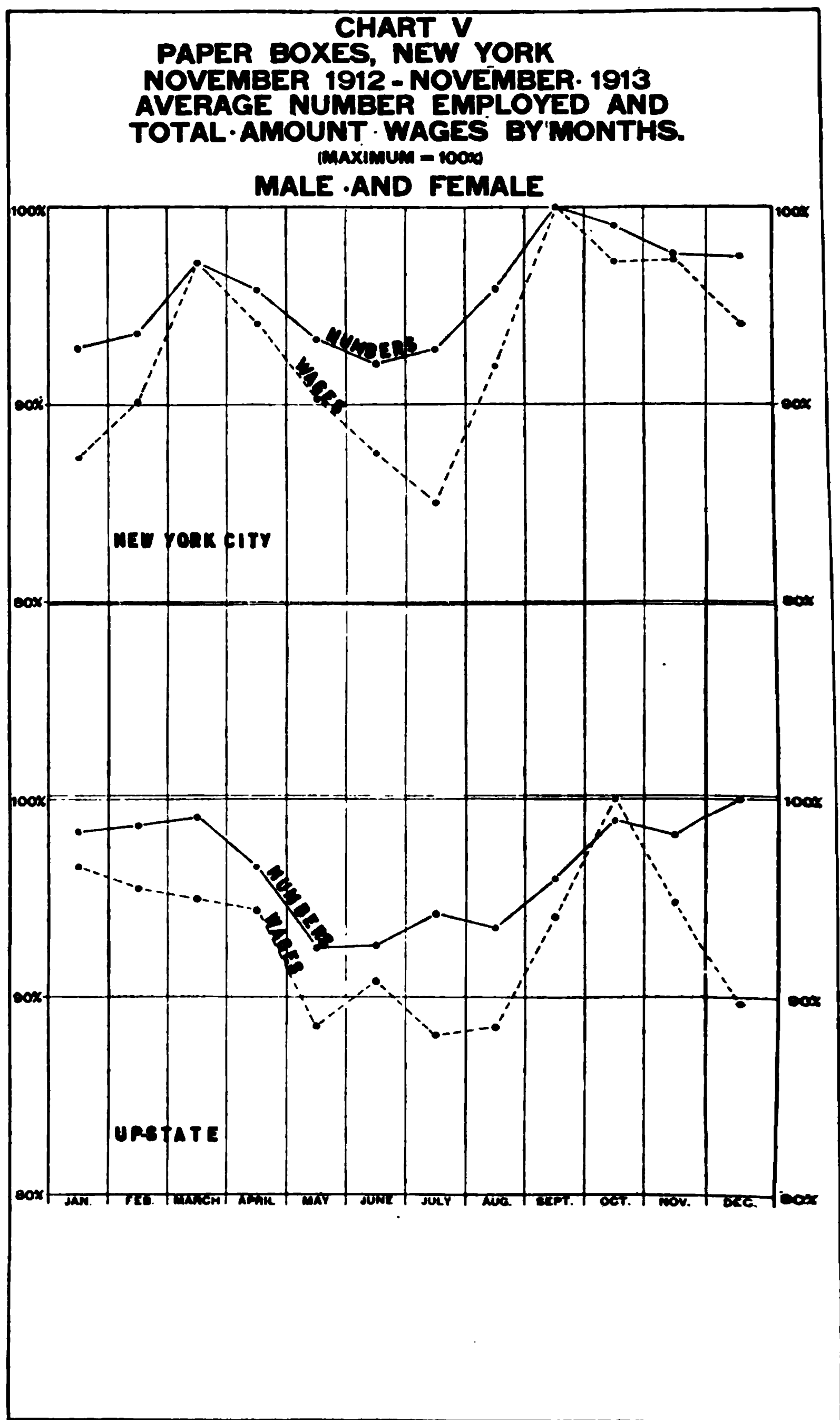
From most of the official statistics, then, it would not seem that the paper box industry was as seriously irregular as many others, yet the contrary is the fact. A consideration of what these two classes of statistics show and do not show, will solve the puzzle. When the "number of days in operation yearly" is given, there is nothing to tell us whether one department or all are at work,



whether or not those at work are on full time or whether a few scattered girls or the full force are working. Statistics as to "average number employed by months" do give us some idea of the latter, but in the paper box industry it is the custom not to close the factory for any length of time, nor to dismiss employees to any very large extent, but to hold as nearly as possible the full force on short time, and consequently on short pay, in order to have the workers ready, not only for the busy season, but also to take care of the occasional order that may come in from time to time. The more detailed statistics following will show further that these measurements alone by no means bring out the entire effect of irregular employment on the income of the worker.

SHIFTING.

In the paper box industry the flux of workers is very great; it is a constantly changing group on which all the seasonal variations fall. In New York City in 1912-13, only a quarter of the women paper-box workers stayed in the same place more than six months. Three-fifths stayed three months or less (see Chart IV), one-half less than two months and two-fifths four weeks or less. Incredibly large numbers drift in for a few days or even hours and then drift out again. Only 15 per cent. were what might be called steady workers, staying eleven months or more out of the year in the same establishment. Three times as many people as were employed at any one time were dropped and added during the year. It is of course true that many of these changes were undoubtedly due to personal reasons. A low-grade, poorly paid, little skilled body of workers in an ever-changing one. Yet such facts as the wholesale dismissal of workers in Philadelphia after Christmas previously mentioned, show that the irregularity of the industry must be held responsible for no small part of the shifting. Here, then, is the casual labor force, the three-girls-for-two-jobs state of affairs, which Beveridge, the English authority, believes to be the fundamental cause of unemployment. A wage rate that made no allowance for irregularity of employment would mean little to these people, who are here to-day and gone to-morrow. Rather, some pressure is needed that will force them out and make it profitable for the manufacturer to furnish steady employment to responsible workers.



VARIATION IN EARNINGS.

In order to discover the great seriousness of seasonal variations in this industry, we must turn to variations in earnings. The first point to be considered is a comparison of the variation in earnings with the variation in numbers, month by month. Such a comparison, for New York City, 1912-13, and for the rest of the State, as given by the State Factory Investigating Commission, shows a considerable loss in actual as compared with possible earnings. In these monthly averages (see Chart V) the extreme weekly variations are smoothed out, yet there is a 15 per cent. difference between the largest and smallest amount of wages, in contrast to an 8 per cent. variation in numbers. The broken line, it will be noted, drops far below the solid one showing that for those employees who were kept on the pay roll, wages fell considerably below normal. But by taking the original figures for the totals of wages and using the totals per week instead of per month, the largest amount paid out is found to be \$60,878 for the last week of September and the smallest \$43,125 for the first week of January. There is a difference here of nearly 30 per cent. (29.3 per cent.) while the largest difference in numbers by weeks is just about 12 per cent. This result corresponds closely to the testimony of 200 women workers questioned by the Factory Investigating Commission about their weekly wages at different seasons. Their average weekly pay varied from \$5.68 in dull times to \$8.13 in the busy season, a difference of almost exactly 30 per cent.

The New York City investigation further shows that the "ordinary" average weekly wage of a woman worker was \$7.36. That is about 10 per cent. less than the "rush reason" weekly wage. We have similar weekly averages for women workers in California and Maryland from an investigation made by the United States Bureau of Labor in 1911. There was a difference of more than 20 per cent. between the weekly average for rush and normal seasons in California (\$8.99 and \$7.03) and of almost exactly 20 per cent. in Maryland (\$6.24 and \$5.01). Differences in earnings from season to season do not seem, therefore, to be confined to New York. Clearly then any minimum wage, based, as practically all awards in this country have been thus far, on

the full time work of the "normal" season, would not give women a living wage when this industry was slack, and offers no guarantee against such dull times.

To examine further the relation between rates and actual earnings, and to determine whether or not earnings usually fell below the rate, a comparison was made of the weekly wage rates of 246 of the women paper box workers in New York City with their actual average weekly wages for the period worked. These figures represent conditions far above the average, since only the best factories keep their books so that reliable figures can be obtained. That this selected group represents to a much greater degree the more permanent class of workers is indicated by the fact that 32 per cent. were annual workers as against 15 per cent. of annual workers for the entire labor force. In addition, to avoid including some absences for personal reasons, when the average weekly earnings were computed, the weeks in which a woman was not working at all were omitted, although the number of such absences greatly increases in the dull seasons and the omission therefore undoubtedly excludes in many cases a part of the wage loss due to industrial conditions. For this particular study therefore the steadier workers in the better factories are under consideration and a certain amount of unemployment is being left out of account.

As already said, comparison was made of the rate of pay and the average weekly earnings of 246 such adult women time workers in the paper box industry. The average weekly earnings of 94 per cent. of these women were below their stated rate of pay. Only 8, or $3\frac{1}{2}$ per cent. had average weekly earnings equal to their rate of pay. The weekly earnings of just 6, or $2\frac{1}{2}$ per cent. of the whole group averaged higher than their rate of pay. For that great majority of the women whose earnings fell below their rate, tables were made to show first by wage groups and secondly by length of time in the same factory, what per cent. of the rate they lost. (See Table 2.) According to the table we find that 62.1 per cent., almost two-thirds, lost over 10 per cent. of their supposed wage during the time they worked, with 26 per cent. losing from 16 to 25 per cent. and 15 per cent. losing more than 25 per cent.—over a quarter—of their supposed income for the

period they worked. It is evident that the lowest paid and most shifting workers are the ones suffering the heaviest losses.

Of those earning under \$5, 77.7% lost over 10% of wages.

Of those earning \$5-5.99, 63% lost over 10% of wages.

Of those earning \$6-6.99, 50% lost over 10% of wages.

Of those earning \$7-7.99, 50% lost over 10% of wages.

Of those earning \$8-8.99, 35.8% lost over 10% of wages.

Of those earning \$9 and over, 28.1% lost over 10% of wages.

When the loss from the rate is computed by length of service, the heavier losses of the "short-time girl" are even more striking.

Of those staying 1-4 weeks in same factory, 85.7% lost over 10% of wages.

Of those staying 5-13 weeks in same factory, 64.1% lost over 10% of wages.

Of those staying 14-26 weeks in same factory, 75.5% lost over 10% of wages.

Of those staying 27-47 weeks in same factory, 57.2% lost over 10% of wages.

Of those staying 48-52 weeks in same factory, 21% lost over 10% of wages.

TABLE 2
PAPER BOXES. NEW YORK CITY. NOVEMBER, 1912-1913
SELECTED FEMALE TIME WORKERS OVER 16. COMPARISON OF RATE OF PAY AND ACTUAL AVERAGE WEEKLY EARNINGS

1A. NUMBERS LOSING GIVEN PERCENTAGES OF THEIR RATE, BY WAGE GROUPS

RATE	PERCENTAGE LOST					Total
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	
Under \$5 00.....	6	10	17	28	11	72
\$5 00- 5 99.....	14	25	21	24	18	102
6 00- 6 99.....	2	5	1	1	1	10
7 00- 7 99.....	3	3	3	3	0	12
8 00- 8 99.....	3	6	3	2	0	14
9 00 and over.....	5	9	3	1	4	22
Total.....	33	58	48	59	34	232

1B. PER CENT LOSING GIVEN PERCENTAGES OF THEIR RATE, BY WAGE GROUPS

RATE	PERCENTAGE LOST					Total
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	
Under \$5 00.....	8.3	13.9	23.6	38.9	15.2	100.0
\$5 00- 5 99.....	14.0	23.0	21.6	24.0	18.0	100.0
6 00- 6 99.....	20.0	50.0	10.0	10.0	10.0	100.0
7 00- 7 99.....	25.0	25.0	25.0	25.0	.....	100.0
8 00- 8 99.....	21.4	42.8	21.4	14.4	.....	100.0
9 00 and over.....	23.8	38.1	14.3	4.8	19.0	100.0
Total.....	14.1	23.8	21.1	26.0	15.0	100.0

2A. NUMBERS LOSING GIVEN PERCENTAGES OF THEIR RATE, BY LENGTH OF TIME IN SAME FACTORY

LENGTH OF TIME IN SAME FACTORY	PERCENTAGE LOST					Total
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	
1- 4 weeks.....	4	4	6	11	19	44
5-13 weeks.....	8	16	10	23	10	67
14-26 weeks.....	3	8	15	14	5	45
27-47 weeks.....	8	9	10	10	0	37
48-52 weeks.....	10	21	7	1	0	39
Total.....	33	58	48	59	34	232

2B. PER CENT LOSING GIVEN PERCENTAGES OF THEIR RATE, BY LENGTH OF TIME IN SAME FACTORY

LENGTH OF TIME IN SAME FACTORY	PERCENTAGE LOST					Total
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-26 per cent.	Over 25 per cent.	
1- 4 weeks.....	7.1	7.1	14.3	26.2	45.2	100.0
5-13 weeks.....	11.9	23.9	14.9	34.3	14.9	100.0
14-26 weeks.....	6.7	17.8	33.3	31.1	11.1	100.0
27-47 weeks.....	22.9	20.0	28.6	28.6	.....	100.0
48-52 weeks.....	26.3	52.6	18.4	2.6	.....	100.0
Total.....	14.1	23.8	21.1	26.0	15.0	100.0

It may be noted that, among the six who earned more than their rate, the gains were small, none over 10 per cent., and that three of the women who gained were "annual workers" — over 48 weeks in the same position.

We find in this selected group, therefore, consisting of the better class workers under the more favorable conditions, that 94 per cent. did not succeed in earning the rate of wages at which they were employed, and that nearly two-thirds of them (62.1

per cent.) lost more than 10 per cent. of their supposed wages. Undoubtedly if similar figures could be computed for the entire industry, even larger losses would be brought out. For instance, for the week in which the Commission collected wage data, rates and earnings in one of the factories especially studied were compared with rates and earnings in a factory keeping no records available for yearly comparisons. Both factories manufactured a similar line of goods, and the factory having yearly records of earnings was one in which about two-fifths of all the cases were found. In the latter establishment no woman was rated at less than \$5 for the week but 9 per cent. received less than that sum, while in the other factory 12.7 per cent. were rated at less than \$5 and 37.4 per cent. received below that amount. It is the latter which is typical of the majority of factories in the city and therefore the trade as a whole would show annual wage-losses even greater than those here discussed.

Moreover, the wage rates just considered are *averages* for the period covered. They in no way show the variation from week to week in a girl's wage. An average is only a composite photograph after all and may or may not represent the experience of any number of workers and, also as in the photograph, the extreme variations are smoothed out. When we trace the changes in a girl's wages week by week, then this irregularity which we chart and discuss like an academic problem, without really feeling it, becomes a human problem, a hard condition with which human beings are struggling. Out of the thousands of similar records, the New York State Factory Commission quotes weekly wages for six girls, "steady, representative workers in different factories." The charts (VI and VII) show, more plainly than words, the way in which the girls' wages vary from week to week. The first of the charts gives for the three piece workers, Annie, Ida and Sarah, their wages averaged by months. Like all averages, it conceals the greatest variations, but the second chart gives their actual *weekly* wages for the third quarter of the year, which is not the period of extreme fluctuations. Because piece workers are paid in proportion to their product, many people think the quick, good worker is rewarded for her unusual ability. But what

CHART VI
PAPER BOXES, NEW YORK CITY
WEEKLY WAGES OF THREE PIECE-WORKERS
FOR A YEAR. AVERAGED BY MONTHS

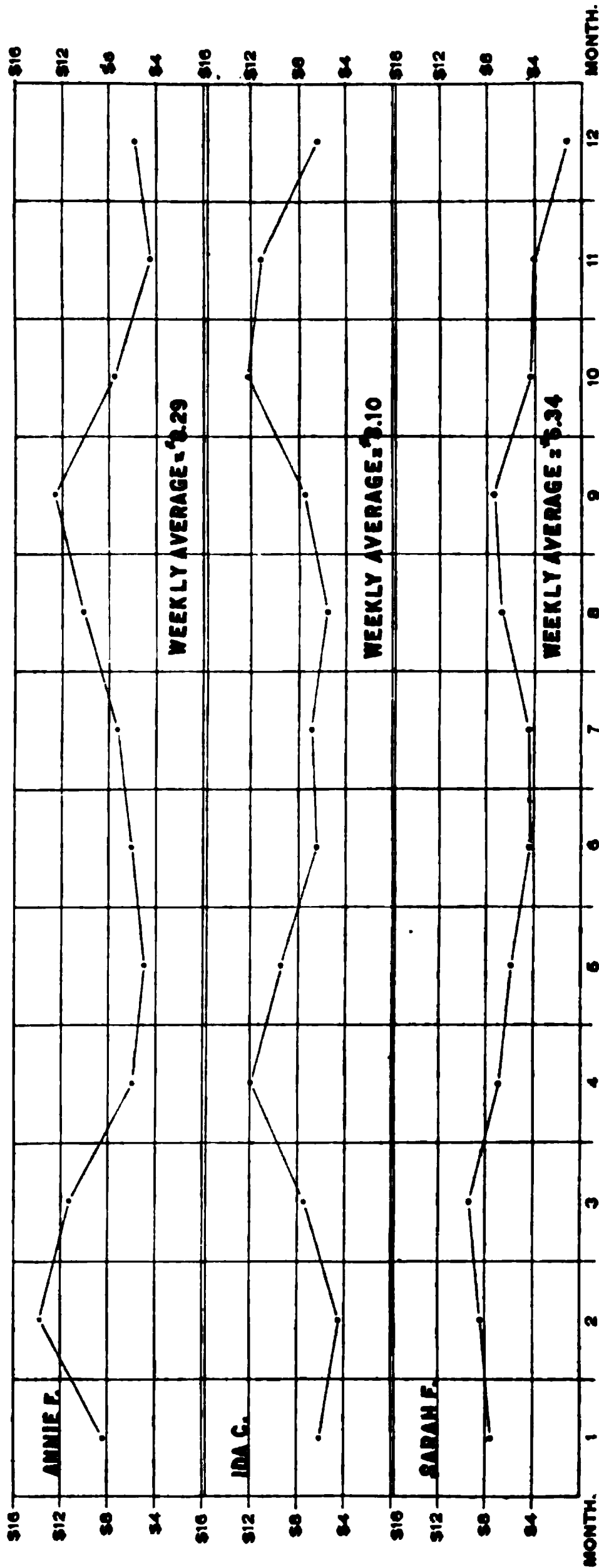
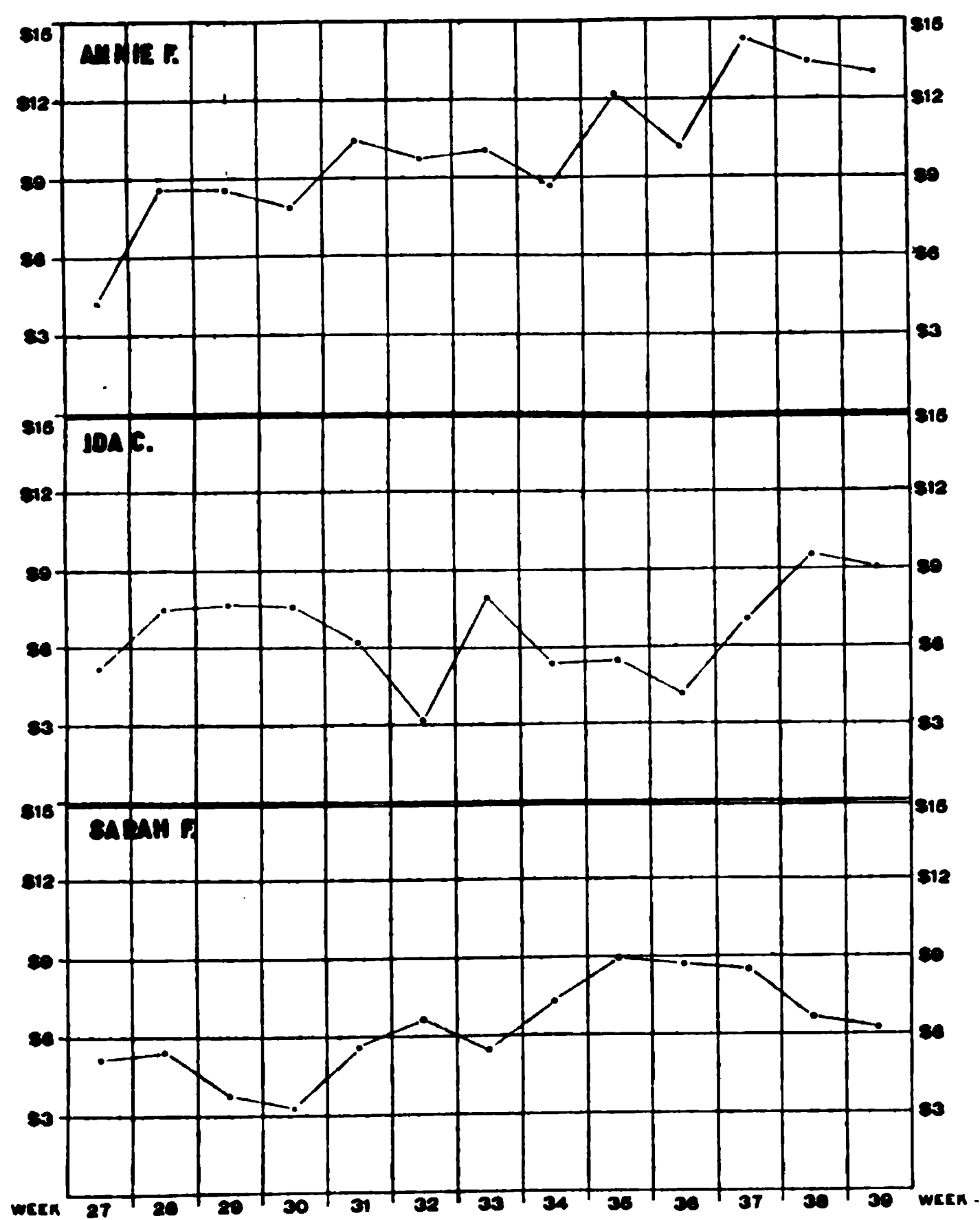


CHART VII
PAPER BOXES NEW YORK CITY
WEEKLY WAGES OF THREE-PIECE-WORKERS
FOR THREE MONTHS



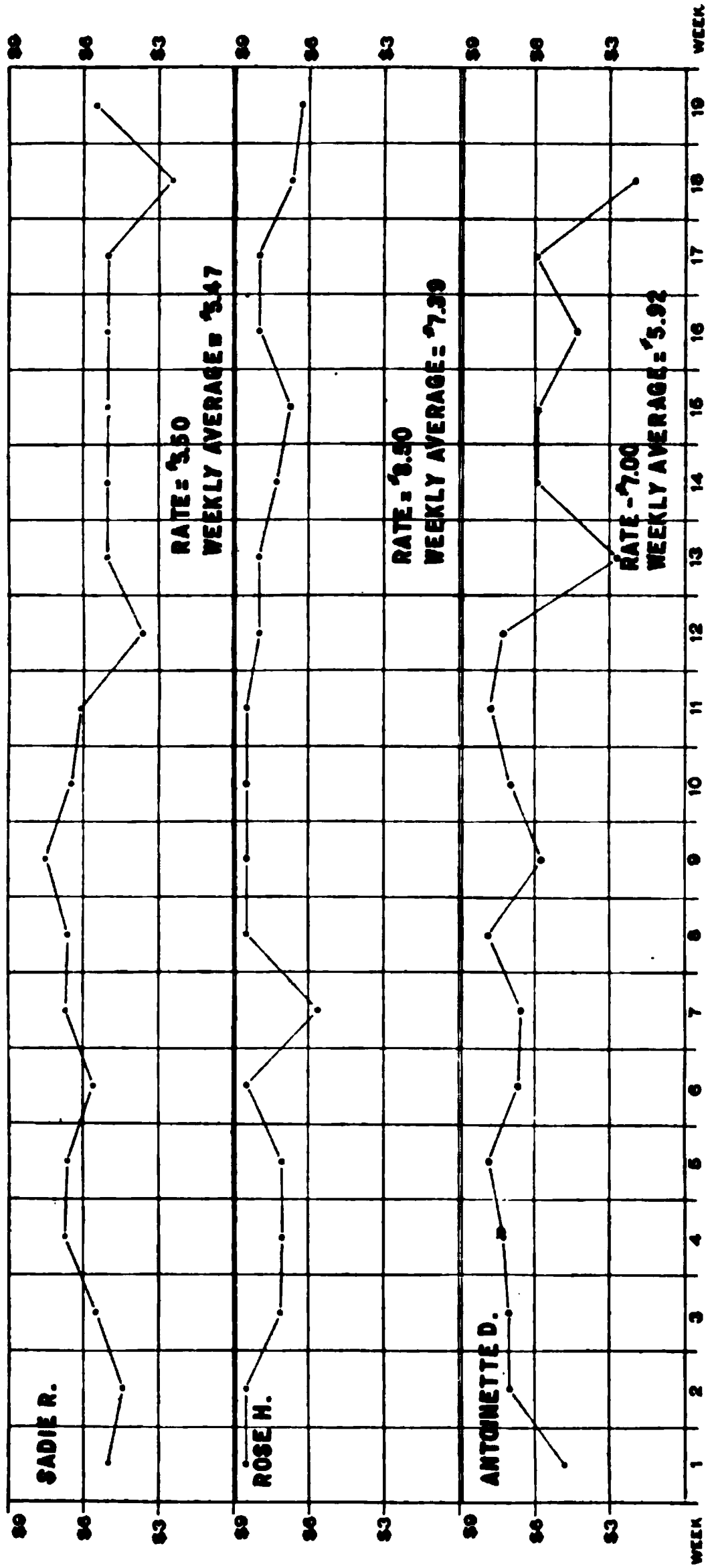
happens to her wage for that much longer period when there is only a little work on hand, and when, after a few hours, she is sent home for the rest of the day? These charts, with their high and low points in each case corresponding to the busy and dull seasons, show clearly how the seasonal variations in the industry cause most of the changes in these girls' wages. Ida's highest weekly wage is \$13.98 and her lowest \$3.20. Annie's varies between \$14.87 and \$3.20, Sarah's weekly wages run all the way down from \$10.62 to \$2.68. When we get down to the actual amounts received by these piece workers, we find just about a 75 per cent. difference between the lowest and the highest wages instead of the 30 per cent. variation which was found between the smallest and largest total amounts paid out weekly in wages and also between the average wage at different seasons.

Moreover, the wages of the three time workers fluctuate nearly as violently and correlate in the same way with the slack and busy seasons. (Chart VIII.) These three rate workers, Sadie and Rose and Antoinette, are supposed to be paid a definite sum each week. But the least and greatest wages they actually receive are \$7.52 and \$2.41, \$8.50 and \$5.34, \$7.76 and \$2. The percentages of difference between these sums are no less than 68, 37 and 74 per cent. While Sadie's weekly rate is \$5.50 and her average weekly wage \$5.47, only a trifle less, Rose never gets more than her rate of \$8.50 and falls below it so often as to bring her average weekly wage down to \$7.39, only seven-eighths as great. Antoinette has a rate of \$7, but an actual weekly average of \$5.92. She loses over a seventh of her rate. The method of payment, it appears, makes but little difference. Whether they are piece or time workers, the employees, through fluctuations in their wages, bear the brunt of seasonal variations. Under these conditions, the setting of a simple minimum wage rate without regard to unemployment would not necessarily produce a living wage.

OVERTIME EARNINGS.

It is sometimes stated that working girls make up by overtime what they lose by undertime. The lower level of average weekly earnings, when compared with rates as shown on the previous

CHART VIII
PAPER BOXES, NEW YORK CITY
WEEKLY WAGES OF THREE TIME-WORKERS FOR NINETEEN WEEKS



pages, is an indirect refutation of that often-heard remark: "Well, after all, they make up in the busy season what they lose in the dull," which argument is sometimes even used as a reason for not limiting women's hours of work. But all the direct evidence at hand, as well as the indirect, shows this belief to be erroneous.

It is unfortunately true that a good deal of overtime does exist for women paper box workers. But in the first place, waiving for the moment all question of the undesirability of overtime work under high pressure for women workers, it appears that the long hours which bring gains in wages are worked by a minority only. In a busy week in New York City in the fall of 1913, 258 of the women considered, or only 8 per cent. of the whole number, worked in excess of the legal number of hours. Forty-one, or only 1.2 per cent. worked all seven days of the week, while a larger number, 861 or 19.7 per cent., lost a day or more. It is apparent that for this group at least only a small part of the workers gained anything through overtime to help them through the slack season. While from the point of view of overtime work a comparatively small number of workers were affected, yet it is apparent that violations of the labor law were not uncommon.

The proportionate rise and fall in wages also must not be forgotten. In the dull season the fall is greater than the rise in the busy season. The New York State Factory Investigating Commission found that the average weekly wage of nearly two hundred women operatives, questioned as to seasonal wages, rose only 10 per cent. above the usual earnings, but dropped 23 per cent. below.

Finally, taking the entire year into account, the slack time is spread out over a much longer period than the rush. The proportions are approximately thirty to twenty weeks. This is quite consistent with the facts about the six "steady, representative workers" whose wages, week by week, have already been considered. It is reasonable to suppose that in the busy season the time workers would at least make their rate. But they fell below it far more often than they rose above it. Sadie was 7 weeks above her rate, 2 weeks at it and 10 weeks below. Rose received her rate only 7 times, never got above it and was below it 29 times. For Antoinette the figures are 5 weeks above her rate,

2 weeks at the rate and 16 weeks below the rate. Following the same line of reasoning, the piece-workers would be likely to go above their average wage in a busy week. Sarah did go above her average weekly wage 26 times and below only 23 times, but both the others fell below their average more often than they went above it. Ida was 23 weeks above and 26 weeks below, while Annie was 24 weeks above and 28 weeks below. In the selected group of time-workers, 94 per cent. had average weekly earnings below their rate, only $2\frac{1}{2}$ per cent. had average weekly earnings above their rate and $3\frac{1}{2}$ per cent. made their scheduled rate of pay. All the facts available, then, agree in showing that the idea of overtime "making up" for undertime is entirely misleading.

SUMMARY.

Looking back over the ground covered, the irregularity in the paper box industry, with the slack seasons in the summer and winter and busy seasons in the fall and spring, may best be realized by a study of the earnings. In contrast to the comparatively small 10 per cent. variation in the number employed at different seasons, we find a 30 per cent. fluctuation in wages, whether measured by averages or totals. The fluctuation in individual cases rises to 75 per cent. and over. In addition, wage gains do not equal wage losses, and the net result of seasonal irregularity is a loss in wages to the employee. The record of the wages of a few individual girls week by week shows, just as an extensive comparison of weekly rates with average weekly earnings shows, an actual income approximately 15 per cent. below the rate. The wage rate is only nominal, a term of little real meaning. These workers are not paid by the week but by the hour or rather by the minute, and in this way in the paper box industry, a casual, shifting group of workers, probably without half realizing it, bears the burden of seasonal irregularity.

THE CONFECTIONERY INDUSTRY

INTRODUCTION.

From all statistics, it is evident that the American people are not losing their taste for sweets. The confectionery industry is a growing and prosperous one. At Christmas time, for instance, there are few homes in which the festivities are complete without some candy, and Easter time again swells the stream of buyers. While most people will recognize the truth of these statements, but few realize the effect of our fluctuating desire for sweets, determining as it does the occurrence of marked busy and dull seasons for thousands of workers. The majority of these workers are women and children under sixteen, many of them employed at less than a living wage. For this reason, this industry has frequently been the subject of investigations by minimum wage commissions in various parts of the country.

GENERAL STATISTICS.

According to the latest United States Census of Manufactures, the average number of wage earners employed in the confectionery industry increased from 26,000 to 44,000, or 66 per cent. in the ten years between 1899 and 1909. Women over 16 formed over half of this labor force, nearly 26,000 as against 14,000 in 1899, an increase of no less than 79 per cent. in the decade. The number of men employed increased but 49 per cent. in the same time, and the number of children under 16, only 58 per cent. Women in this industry are, therefore, not only in the majority, but are also tending to displace other classes of employees. This is further evident from the fact that, while in 1899 men were 40 per cent. and women 53 per cent. of the whole number of wage earners, in 1909 the proportion of men had fallen to 35 per cent., but the proportion of women had risen to 58 per cent. The percentage of children under 16, the larger number of whom are girls, remained about the same, 6 per cent.

This increased proportion of women is due in part to a more extensive use of machines and a consequent need for a larger number of unskilled employees. For instance, a machine which automatically shapes the cream centers of bonbons and chocolates needs only one regulator and four or five helpers to do the work formerly done by thirty skilled men. In this way the number of women increases, for in the making of candy as in so many other industries the men perform the more highly skilled tasks and the women the simpler and more mechanical ones. Men do all the cooking and moulding of the different candy mixtures; whereas among the women the only skilled workers are the "dippers," who cover the centers of chocolates and bonbons. The majority, however, are employed as "wrappers" and "packers" and as "helpers" who fetch and carry for the rest.

New York has the largest number of women candy workers, 5,679 on December 15, 1909, according to the Census of Manufactures. Massachusetts comes second with 4,140. The other states employing more than a thousand women wage earners over sixteen years old are, in the order named, Pennsylvania, Illinois, Ohio, Missouri and Wisconsin.¹ In addition to the more detailed facts for Massachusetts and New York City, information has been secured from widely scattered points—from the states of California, Kentucky, Maryland, Minnesota, Oregon and Wisconsin and the cities of Chicago, Pittsburgh, and Kansas City.

SEASONAL VARIATIONS.

So many aspects does this industry present that it is even more difficult than usual to measure its irregularity. First, we find that during the four autumn months a much larger force of workers is used than can find places for the rest of the year. After Christmas, a good many employees are dismissed. At the

1 CONFECTIONERY INDUSTRY

NUMBER OF WOMEN OVER 16 EMPLOYED DECEMBER 15, 1909

[United States Census of Manufactures, Vol. IX, Table II for each State]

New York.....	5,679	Missouri.....	1,350
Massachusetts.....	4,410	Wisconsin.....	1,087
Pennsylvania.....	3,839	All other States.....	9,735
Illinois.....	2,645		
Ohio.....	1,708	Total.....	30,453

same time the entire factory may close for a week or so, and in July this is still more likely to happen. Or perhaps the factory runs four or five days a week instead of the regular six. Many factories do not close as a whole, but different departments may close for a few days at a time through the dull season, according to the work on hand. Then too, the regular weekly schedule of hours is likely to be shorter in the slack than in the rush season, and often the actual hours worked are even less than these scheduled hours.

STATISTICS OF IRREGULAR EMPLOYMENT.

In so complicated a situation many of the ordinary measures of irregularity fall short of showing the true state of affairs.

Here again, according to the "days in operation yearly" in Massachusetts, candy factories worked on the average 292 days out of a possible 305, in New Jersey, 297, in Pennsylvania, 300. From this one would think that a steady worker need miss comparatively little time. But when a single factory is taken, and just what the steady workers lose in the way of short time is shown, the inadequacy of these figures becomes clear. This may be illustrated by the detailed report of short time in one factory cited as typical by the Massachusetts Commission on Minimum Wage Boards. This establishment was shut down for two weeks in July and also on two separate occasions in May and two in June, losing five and a half days in this way. Thus during the year there would be a loss of $17\frac{1}{2}$ working days, or according to the statistics of "days in operation yearly" $287\frac{1}{2}$ days would be worked. But in addition no less than twenty-four times during the dull half of the year, that is, between January and July, from one to twenty-one departments were closed for from one to three days at a time, as work fluctuated. The least number of days lost in this way was five and a half in three different departments; the greatest number $28\frac{1}{2}$ days in one department; the other losses ranged between these two amounts. The tables following give this loss of days by dates and departments. The entirely irregular way in which the days of unemployment occurred made it absolutely impossible for employees to make up the time and earnings thus lost by turning to other work. Since

some parts of the factory were running at each of these times, none of this considerable loss is disclosed under the statistics of "days in operation yearly," which are thus entirely inadequate as a measure of the extent of irregularity.

TABLE 3
CONFECTIONERY—MASSACHUSETTS, 1911

IRREGULARITY OF EMPLOYMENT IN A MASSACHUSETTS CANDY FACTORY, 1911

A. DATES, NUMBERS OF DAYS AND NUMBER OF DEPARTMENTS CLOSED, IN ADDITION TO A SHUT-DOWN OF TWO WEEKS IN JULY. (TOTAL NUMBER OF DEPARTMENTS, 26)

(From report of the Commission on Minimum Wage Boards, pages 64 and 65)

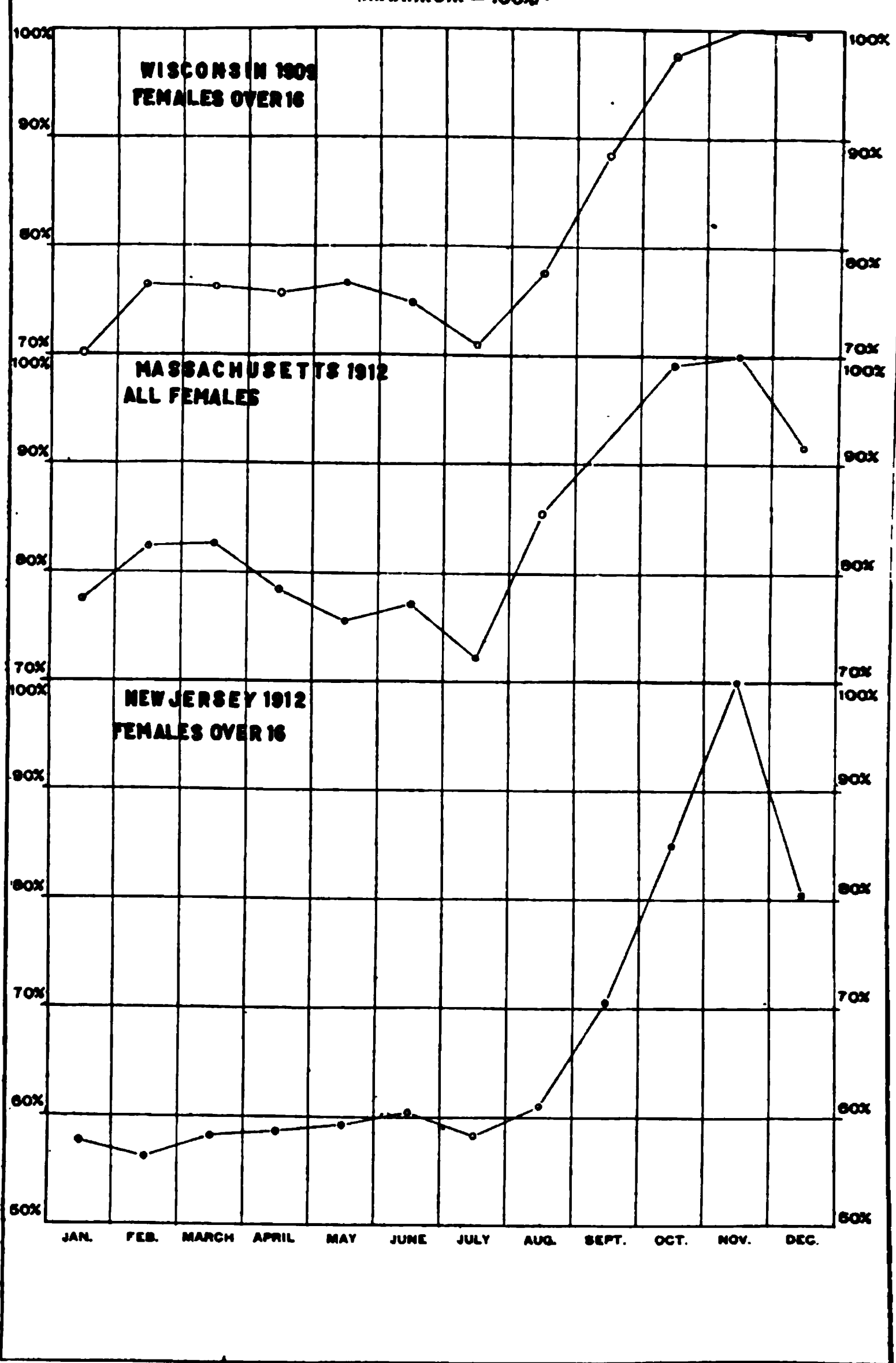
DATE	Number days closed	Number departments closed	DATE	Number days closed	Number departments closed
January 7....	1	5	April 22.....	3	14
14....	1	2	29.....	1	12
February 11....	2	2	May 6.....	2	18
18....	2	2	13.....	2	All employing women.
25....	1	1	20.....	2	11
March 15....	1	1	27.....	1½	All employing women.
18....	2	2	June 3.....	1	All employing women.
25....	2	4	4.....	1	3
April 1....	2	14	10.....	1	8
8....	2½	6	11.....	1	2
15....	3 and 2	21	17.....	1	5
			25.....	1	All employing women.

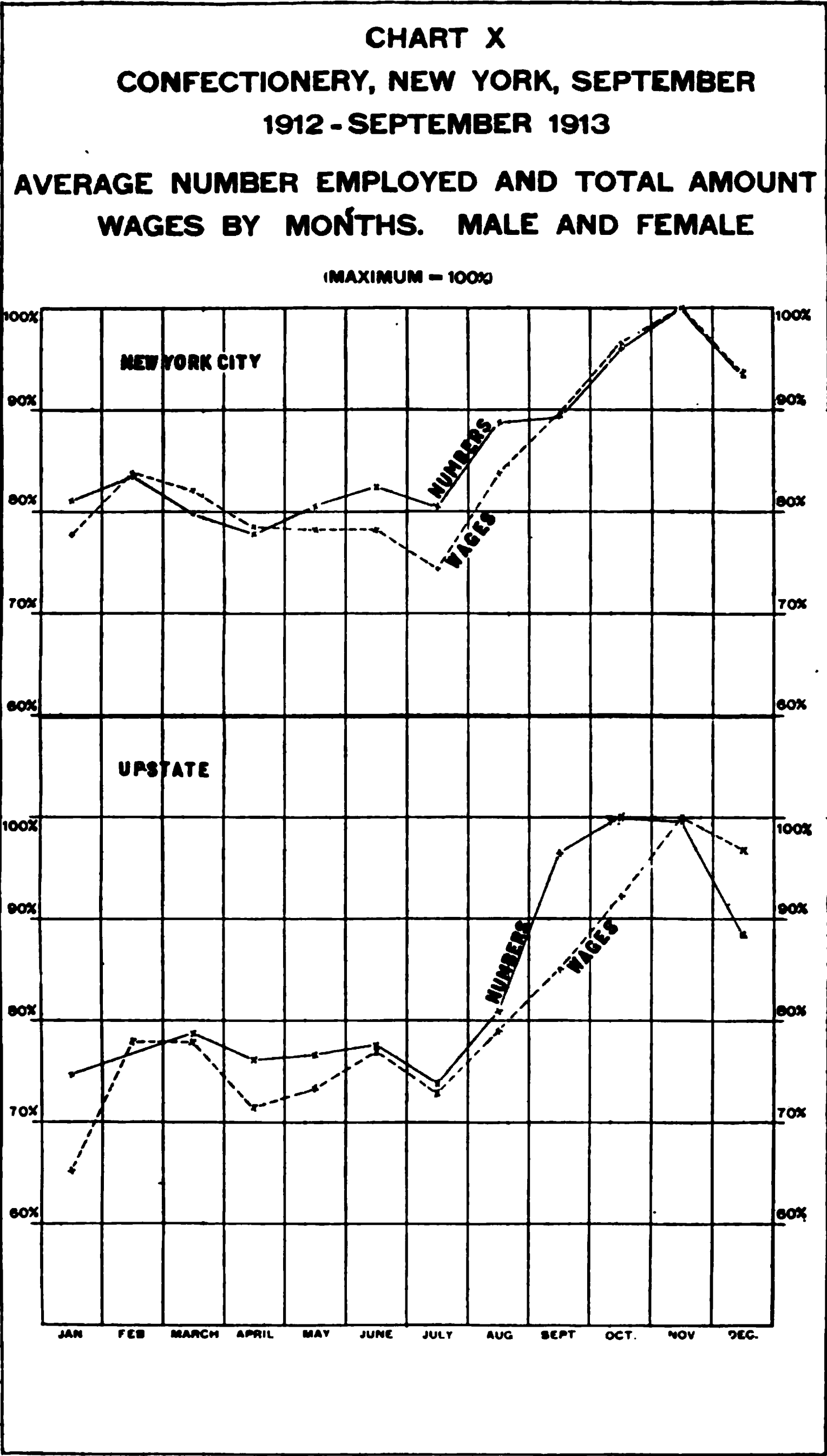
B. NUMBER OF DAYS EACH DEPARTMENT WAS CLOSED

Department No.	Work- ing days closed	Department No.	Work- ing days closed	Department No.	Work- ing days closed
1.....	9	10.....	24	19.....	7½
2.....	14	11.....	19	20.....	15
3.....	23	12.....	16	21.....	7½
4.....	19	13.....	28½	22.....	19
5.....	5½	14.....	5½	23.....	15½
6.....	6	15.....	20½	24.....	15
7.....	8½	16.....	18½	25.....	13
8.....	19	17.....	18½	26.....	5½
9.....	13	18.....	15		

Besides "days in operation yearly" the other common method of measuring seasonal irregularity is that of giving the "average number employed by months." We have these figures for the women workers in Massachusetts, 1912, New Jersey, 1912 and Wisconsin, 1909, and for all workers in New York City, and up-state, September, 1912–September, 1913. (See charts IX and X.) This last set of figures comes from the New York Commission; the others from state labor reports. In every case

CHART IX
CONFECTIONERY
AVERAGE NUMBER EMPLOYED BY MONTHS
(MAXIMUM = 100%)





the year is the latest for which the figures are compiled. The percentage of difference between the largest and smallest number employed is nearly 45 per cent. in New Jersey, and about 25 per cent. in the three other states. This latter figure corresponds closely to the per cent. of difference in numbers employed in quite a different locality, Kansas City, where a maximum of 900 and minimum of 670 were found, a difference of just about 25 per cent.

The statistics of "average number employed by months" show, then, that a considerable part of the employees cannot find work in the industry during the entire year. Being totals for a large number of factories they do not, however, bring out the real extent of the fluctuations in certain establishments. Some factories hold their employees during the year much more steadily than others, as is disclosed by a table of the monthly fluctuations of numbers for the twelve largest factories in Massachusetts. In the factory least affected by seasonal differences, the smallest number employed in any month is 70 per cent. of the largest number, but in the factory most affected, the smallest number is only 22.7 per cent. of the largest number.

TABLE 4
CONFECTIONERY — MASSACHUSETTS, 1911

MONTHS WHEN MINIMUM AND MAXIMUM NUMBERS ARE EMPLOYED, AND SMALLEST PER CENT. OF MAXIMUM EMPLOYED IN THE TWELVE LARGEST CANDY FACTORIES IN MASSACHUSETTS
(Adapted from the Report of the Massachusetts Commission on Minimum Wage Boards, p. 67)

FACTORY NO.	Month when largest number were employed	Month when smallest number were employed	Per cent. smallest number is of largest number employed
1.....	Oct.	July	22.7
2.....	Sept., Oct., Nov., Dec.	June, July, Aug.	70.0
3.....	Sept.	Nov.	67.7
4.....	Nov.	Jan.	55.7
5.....	Nov.	Jan.	55.2
6.....	Nov., Dec.	Jan.	56.8
7.....	Sept.	Feb.	60.1
8.....	July	Oct.	80.3
9.....	May	March	73.8
10.....	Oct.	July	43.3
11.....	Sept.	April	73.9
12.....	Oct.	Jan.	52.0

However, even though a woman can find a place on the payroll of some factory throughout the year, this does not mean that

she does not lose time and money through slack work. As shown in the description of the irregularity of a typical Massachusetts factory, besides a probable closing of the factory for a week or two, the day lost here and there and the shorter daily working time—all decrease the hours she works and consequently her pay. Almost all steady workers do suffer from such losses. In Massachusetts, nearly 500 steady workers who remained in the same factory throughout the year, were questioned as to time lost. Ninety-five per cent. of them lost time from industrial causes during the year, missing an average of 20 entire working days or over 3 weeks—nearly 7 per cent. of their whole period of employment. The table following shows that the largest group lost between 25 and 30 entire days. Industrial conditions were reported responsible for three-quarters of all the time lost. Since wages always decrease with time lost, in this way alone, through the loss of entire days, the usual minimum wage rate would fail to provide these steady workers with a living wage by about 7 per cent. Moreover, this does not include the further extensive loss from short hours on days when but little work is done. The “average number employed by months” indicates, therefore, the extent to which workers cannot find a place in the industry for the entire year, but conceals differences between establishments and tells nothing as to the effect of seasonal irregularity on those workers who keep their places throughout the year.

TABLE 5
CONFECTIONERY—MASSACHUSETTS, 1911

NUMBER OF ENTIRE DAYS LOST BY “STEADY” WOMEN WORKERS THROUGH INDUSTRIAL CONDITIONS

(Adapted from Report of the Commission on Minimum Wage Boards, pp. 263-267)

NUMBER WORK- ING DAYS LOST	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	61-90	1-90	0
Number losing..	50	56	67	84	122	49	15	6	5	1	1	456	23

SHIFTING.

In New York City, in the year studied by the Factory Investigating Commission, September 1912 to September 1913, 45 per cent. of the women stayed four weeks or less in the same place and a total of 66 per cent. less than three months; 13 per cent.

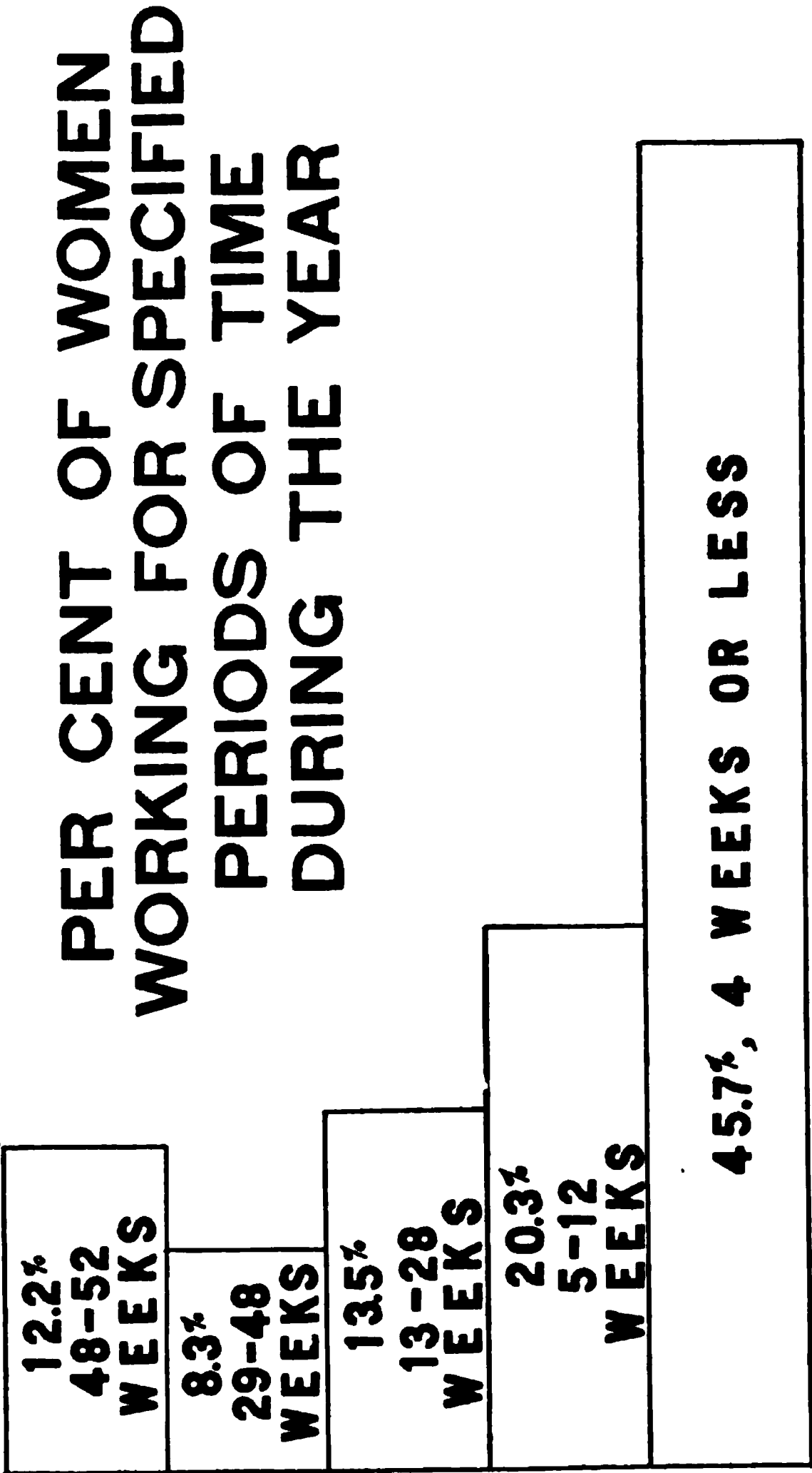
remained from three to six months and 8.3 per cent. over six months and less than eleven months. Only 12 per cent. held their places over eleven months. (See Chart XI.) In Massachusetts in 1913-14, the Minimum Wage Commission found the number of months during which over 3,000 women in the fourteen largest factories had remained in the same establishment. All those leaving in less than four weeks were excluded and, considering the large numbers who leave after a few days' work, the showing is, in this way, made much more favorable. Even so, 36.9 per cent. stayed less than three months and only 21.8 per cent. more than eleven months. Twenty-three and a half per cent. remained three to six months and 17.8 per cent. from six to eleven months. An almost negligible percentage of the entire number found employment for the entire twelve months.

There were, however, great differences between the different factories in respect to the steadiness of their employees. One establishment held 16 per cent. of its workers for the whole twelve months, whereas four kept no workers at all throughout the entire year. Those finding work for eleven months varied from 12 per cent. to over 70 per cent. By occupations the differences were not so marked. The skilled dippers were most permanent in tenure, as might be expected, and the absolutely unskilled floor-girls the least, but in general the different occupations ran pretty closely together.

Like evidence, though from a slightly different point of view, comes from the results of a federal investigation made in 1911 in the two widely separated states of Maryland and California. The average number of weeks' employment yearly for all women candy workers was thirty-nine in the one state and forty-five in the other. Allowing for the fact that some of these workers must have been steady throughout the year, many others must have been able to find work for very short periods only.

Those who are dismissed on account of the slack season must find it especially difficult to obtain other work, since they lose their places after Christmas and in the summer, when most other women's trades are dull. And in Massachusetts, in 1911, out of about 850 such changes from factory to factory, 22 per cent. were said by the women changing to have been made on account of slack work.

CHART XI
CONFECTIONERY, NEW YORK, SEPTEMBER
1912 - SEPTEMBER 1913



VARIATION IN EARNINGS

The effect of irregular employment upon income remains to be considered. How much do steady workers lose on account of dull seasons? Do short period workers also lose? Do time-workers succeed in making their nominal rate of pay? In comparing the fluctuations in the total amount of wages paid out in New York City, 1912-13, the percentage of difference between the largest and smallest amounts by months is but slightly larger than the monthly percentage of difference in numbers, 25 per cent. for wages and 23 per cent. for numbers. But when we examine the total sums paid out each week, we find a difference of over 35 per cent. between maximum and minimum, a variation considerably greater than the 25 per cent. difference in numbers employed by weeks. Slack work must account for the periods when the wage line dips far below the line for numbers. (See Chart X.)

In Massachusetts, the Commission on Minimum Wage Boards made a study of losses in earnings among "steady" workers. The average weekly earnings of 469 women who remained with the same firm the entire year were found to be \$5.33. The average weekly earnings for those weeks in which they worked was \$5.97. Thus allowance was made for all absences for an entire week, though not for losses from short time within a week. But even this average weekly loss of 64 cents, excluding as it did part of the loss from seasonal irregularity, was more than 10 per cent. of the average weekly income. This loss was produced "largely by industrial causes" says the Commission.

Most of the women employees in candy factories are time workers. This does not mean, however, that such workers who keep their places during the slack season really make their nominal weekly rate during that time. To illustrate this point the Massachusetts Minimum Wage Board selected a single wage sheet from one pay roll. It was a "typical sheet" selected at random and contained the names of forty-three time workers, at work for the factory an average of forty weeks during the year. That is, they were comparatively steady workers. On the average, they received their scheduled rate just a quarter of the time or ten weeks out of the forty. Their average exceeded the rate nine times and fell below it twenty-one times. Not one received her rate for

half the time she worked, or earned more than her rate as often as she earned less. In every case the actual average earnings of these women if computed would have fallen below their rate. Both the report of the Massachusetts Minimum Wage Commission and the New York State Factory Investigating Commission compare rates and earnings for women in the confectionery industry in 1913, and both show earnings falling below the rates, though the New York report took a week in the "normal" or busier season and the Massachusetts report considered average weekly earnings for the year. In New York City in the selected week only 19 per cent. of the women were working at a rate of under \$5, but 30 per cent. actually took home such amounts in their pay envelopes. In Massachusetts for the whole year 26 per cent. were rated under \$5, but 49 per cent. actually earned such a sum. (See Chart XII.)

A comparison between the possible hours based on full running time, and the hours actually worked by 1,115 female time-workers in three Massachusetts candy-factories during 1913, illustrates the conditions probably responsible for this discrepancy. (See Chart XIII.) In the first place the running time of the factories varies considerably from season to season, falling off in the summer and rising high before Christmas as the solid line shows. There are two different reasons for this variation; both illustrative of different phases of industrial irregularity. The one is the great increase in the number employed during the busy season; the other, the lengthening of the running time ten or fifteen per cent. at the same period. But in only two or three weeks during the busy season when overtime is undoubtedly worked, do the hours of actual work (represented by the broken line), exceed or even so much as equal this changing running time. For all the rest of the year hours worked fall decidedly below possible hours. Such a difference between actual and possible hours of work is found among all classes of employees, the skilled dippers and "fancy packers" as well as among the unskilled "plain packers." (See Chart XIV.) It is true that a better organization of the industry would require a somewhat smaller labor-force and a few women would thus be thrown entirely out of work if actual hours more nearly equalled possible hours. On the other hand full time

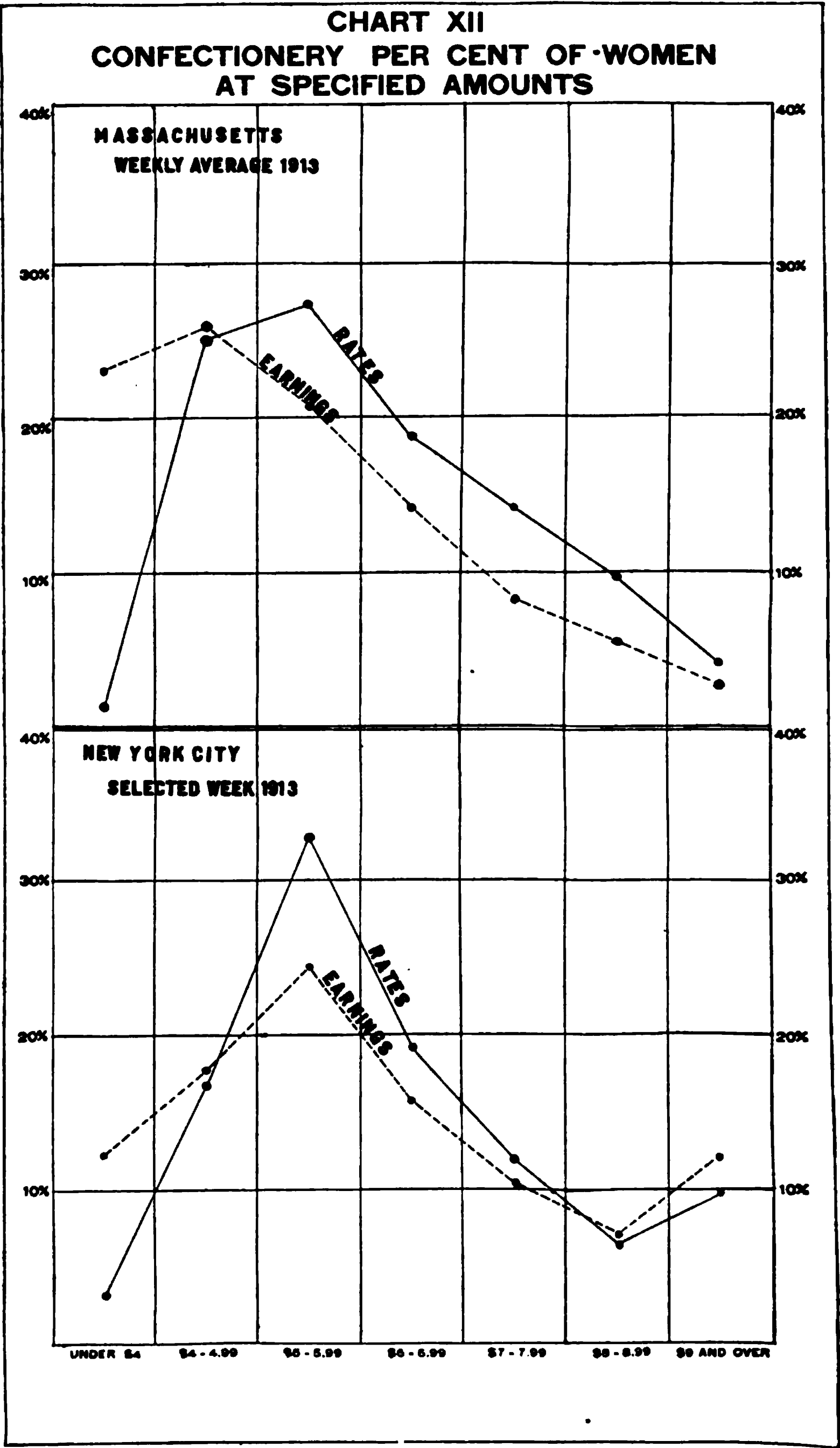


CHART XIII
CONFECTIONERY, MASSACHUSETTS 1913
FULL RUNNING TIME AND NUMBER OF
HOURS ACTUALLY WORKED BY 1115 WOMEN
IN THREE FACTORIES

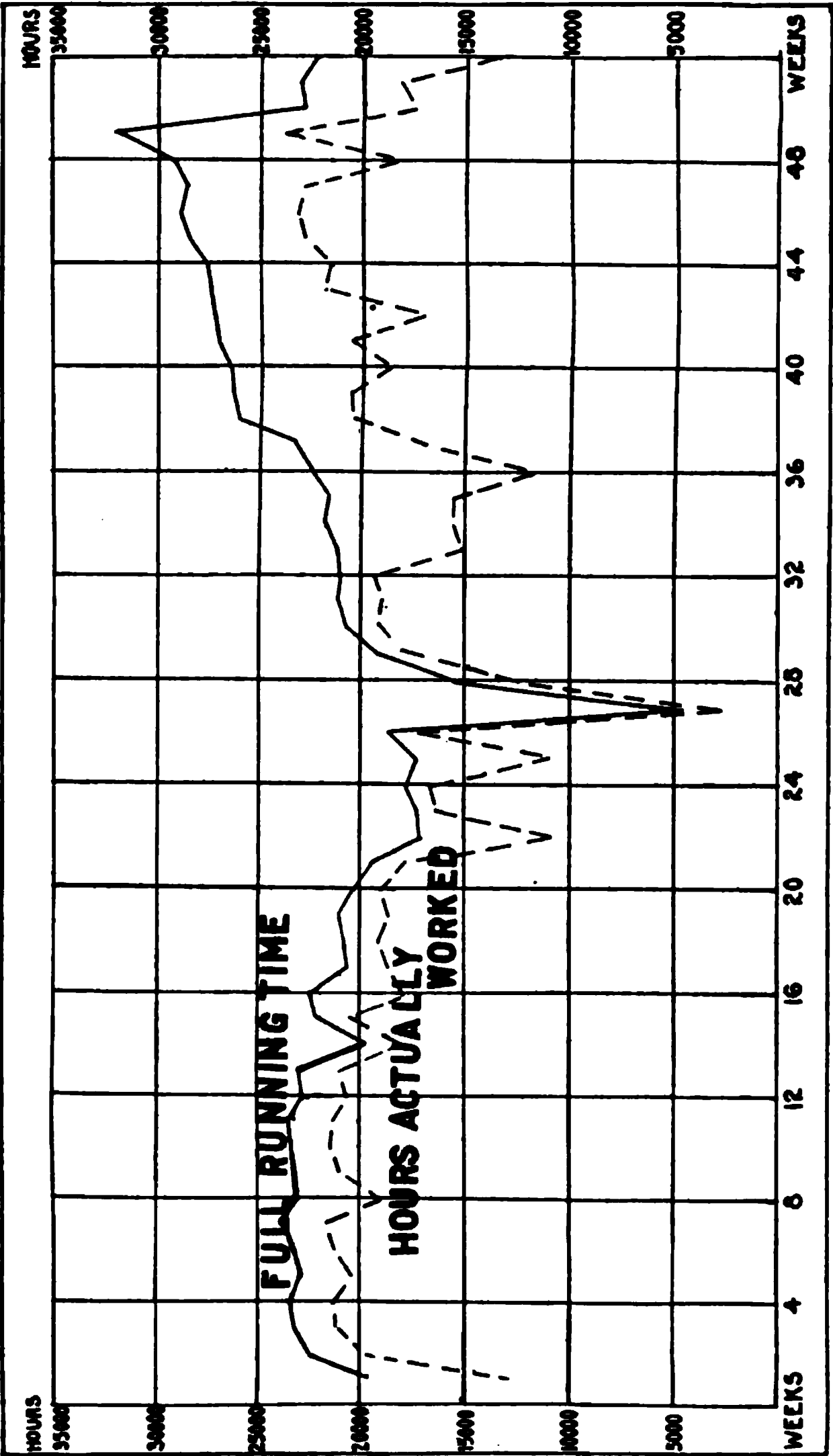
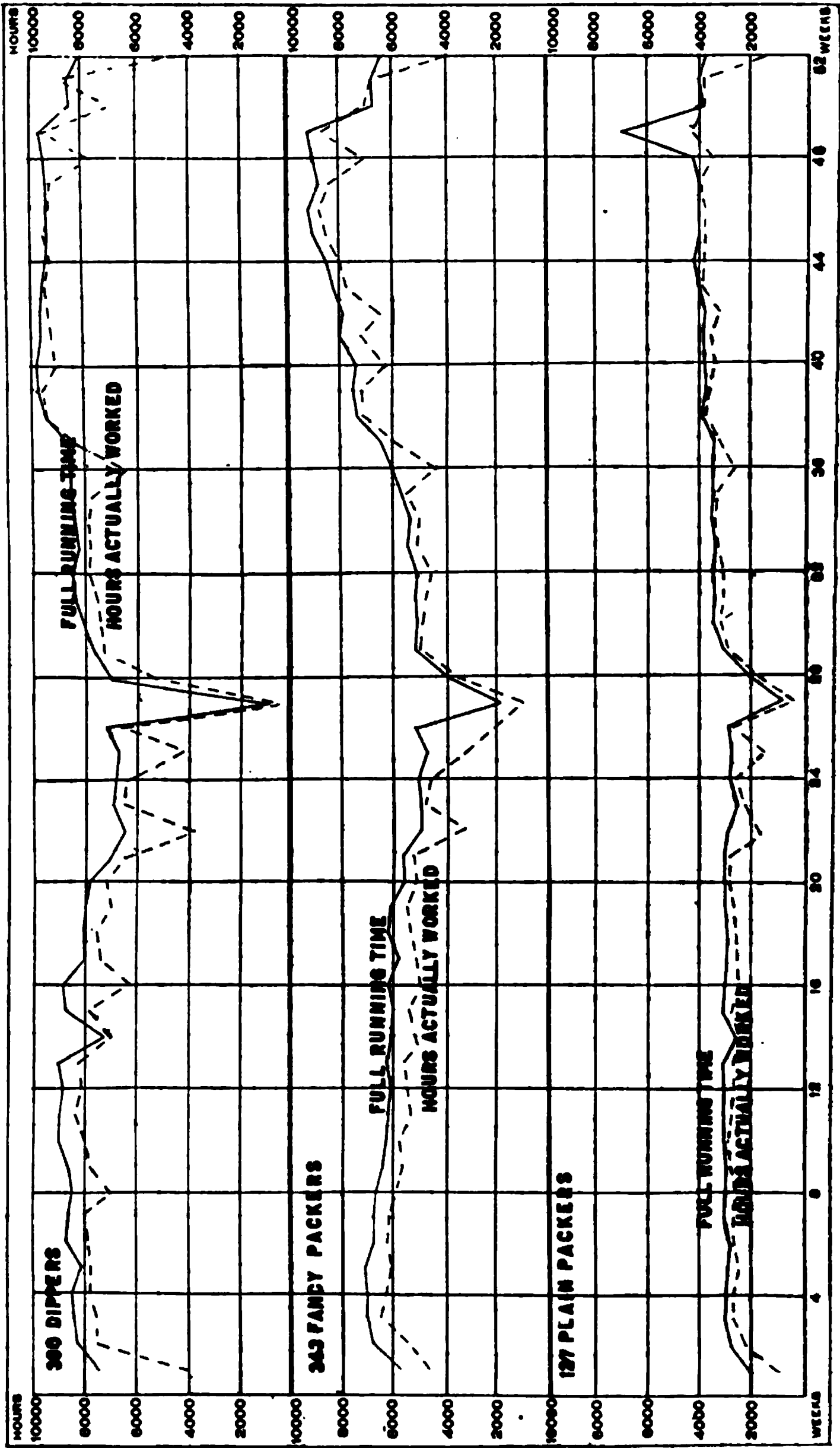


CHART XIV
CONFECTIONERY, MASSACHUSETTS 1913
FULL RUNNING TIME AND HOURS ACTUALLY WORKED BY
CERTAIN WOMEN EMPLOYEES IN THREE FACTORIES



employment would be given to the majority of the workers, which would seem to be the more desirable policy from all points of view, for it is better for a few to be forced to look for other employment, rather than to allow the whole force to drag on under-employed and with reduced earnings. The existing situation makes it evident that rates or running time can not at present be considered a reliable index to actual earnings.

A special study of rates and earnings was made which included every New York City candy factory which kept records of the weekly rate of wages and actual weekly earnings of their women workers. The rate-workers selected in this way were far above the average, and included only the best factories, the steadier workers, and in addition excluded a certain amount of unemployment. (See "Paper Box Industry, p. 536.) Yet in almost every case earnings were found to be below the scheduled rate.

This group consisted of 1,063 time workers, the earnings of 953 or 89.7 per cent. of this number fell below their rate of wages, while for only 18 were earnings and rates equal, and 92 received earnings higher than their rate of wages. Sixty-three and four tenths per cent. of the 953 women who suffered a loss in earnings, lost more than 10 per cent. of their rate; 18.8 per cent. lost from 11 per cent. to 15 per cent.; 25.3 per cent. lost from 16 per cent. to 25 per cent.; and 19.3 per cent., nearly a fifth, lost over a quarter of their supposed income. There are only slight differences in the severity of the losses suffered by the high and by the low paid workers.

Of those earning under \$5, 72.1% lost over 10% of wages.

Of those earning \$5-\$5.99, 62.3% lost over 10% of wages.

Of those earning \$6-\$6.99, 59.5% lost over 10% of wages.

Of those earning \$7-\$7.99, 57.4% lost over 10% of wages.

Of those earning \$8-\$8.99, 57.4% lost over 10% of wages.

Of those earning \$9 and over, 66.3% lost over 10% of wages.

But many of the women who stayed only a short time in the same factory lost more heavily than did the more permanent workers.

Of those staying 1-4 weeks in same factory, 84.1% lost over 10% of wages.

Of those staying 5-13 weeks in same factory, 71.2% lost over 10% of wages.

Of those staying 14-26 weeks in same factory, 48.2% lost over 10% of wages.

Of those staying 27-47 weeks in same factory, 61.2% lost over 10% of wages.

Of those staying 48-52 weeks in same factory, 44.7% lost over 10% of wages.

TABLE 6
CONFECTIONERY — NEW YORK CITY, SEPTEMBER, 1912-1913
SELECTED FEMALE TIME WORKERS OVER 16. COMPARISON OF RATE OF PAY AND ACTUAL
AVERAGE WEEKLY EARNINGS

1A. NUMBER LOSING GIVEN PERCENTAGE OF THEIR RATE, BY WAGE GROUPS

RATE	PERCENTAGE LOST					
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	Total
Under \$5 00.....	22	31	35	48	54	190
\$5 00- 5 99.....	59	65	58	74	59	305
6 00- 6 99.....	42	58	44	56	47	247
7 00- 7 99.....	21	16	17	26	9	89
8 00- 8 99.....	11	8	6	16	4	45
9 00 and over.....	16	10	19	21	11	77
Total.....	161	188	179	241	184	953

1B. PER CENT. LOSING GIVEN PERCENTAGES OF THEIR RATE, BY WAGE GROUPS.

RATE	PERCENTAGE LOST					
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	Total
Under \$5 00.....	11.6	16.3	18.4	25.3	28.4	100.0
\$5 00- 5 99.....	16.1	21.3	19.0	24.2	19.1	100.0
6 00- 6 99.....	17.0	23.5	17.9	22.6	19.0	100.0
7 00- 7 99.....	23.5	17.9	18.1	29.2	10.1	100.0
8 00- 8 99.....	24.4	17.8	13.3	35.5	8.9	100.0
9 00 and over.....	20.8	12.9	24.7	27.3	14.3	100.0
Total.....	16.9	19.7	18.8	25.3	19.3	100.0

RELATION OF EMPLOYMENT TO WAGE FOR WOMEN 563

2A. NUMBERS LOSING GIVEN PERCENTAGES OF THEIR RATE, BY LENGTH OF TIME IN SAME FACTORY

LENGTH OF TIME IN SAME FACTORY	PERCENTAGE LOST					
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	Total
1- 4 weeks.....	15	20	21	44	121	221
5-13 weeks.....	31	35	48	74	45	233
14-26 weeks.....	25	35	14	36	6	116
27-47 weeks.....	19	36	41	37	9	142
48-52 weeks.....	71	62	55	50	3	241
Total.....	161	188	179	241	184	953

2B. PER CENT. LOSING GIVEN PERCENTAGES OF THEIR RATE, BY LENGTH OF TIME IN SAME FACTORY

LENGTH OF TIME IN SAME FACTORY	PERCENTAGE LOST					
	5 per cent. or less	6-10 per cent.	11-15 per cent.	16-25 per cent.	Over 25 per cent.	Total
1- 4 weeks.....	6.7	9.0	9.5	19.9	54.7	100.0
5-13 weeks.....	13.3	15.0	20.6	31.3	19.3	100.0
14-26 weeks.....	21.5	30.2	12.0	31.0	5.2	100.0
27-47 weeks.....	13.4	25.3	28.9	26.0	6.3	100.0
48-52 weeks.....	29.4	25.7	22.8	20.7	1.2	100.0
Total.....	16.9	19.7	18.8	25.3	19.3	100.0

Only 12 of the 92 women whose average weekly earnings exceeded their rate, gained more than 10 per cent. Fifty-three or over half gained 5 per cent. or less, and 27 gained between 5 per cent. and 10 per cent. Not only did far fewer women gain than lose, but the gains were not so great as the losses. The gains fell with about equal frequency among the different wage groups, but the short period workers were the group more often found to gain, probably because more of them are at work only through the busy season.

We find therefore these steadier workers in the better factories suffering at the most conservative estimate losses which average 15 per cent. from their nominal rate of pay. Undoubtedly the loss of other women in the trade would be much greater. Unless the seasonal irregularity of the industry were overcome, or wage-

CHART XV
CONFECTIONERY, NEW YORK CITY
WEEKLY WAGES OF THREE PIECE-WORKERS
FOR A YEAR. AVERAGED BY MONTHS

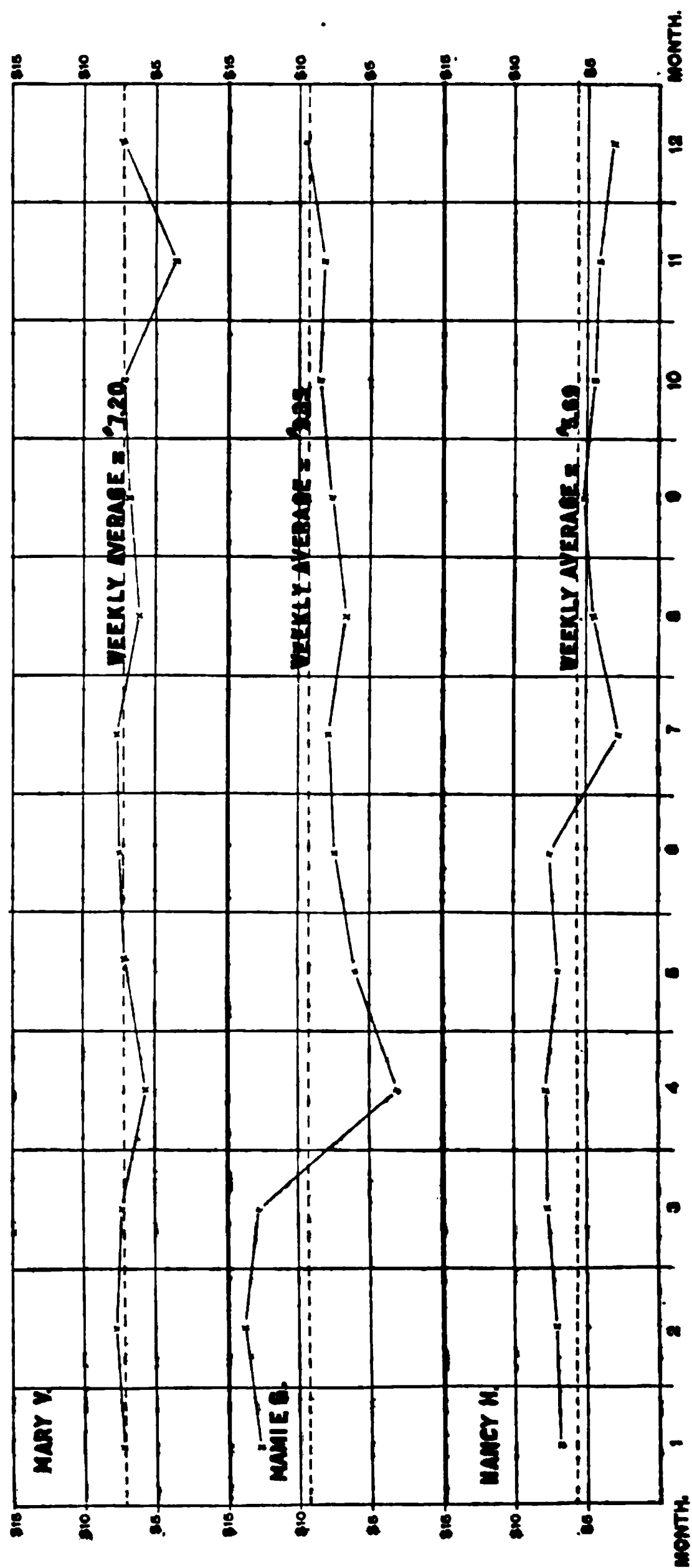
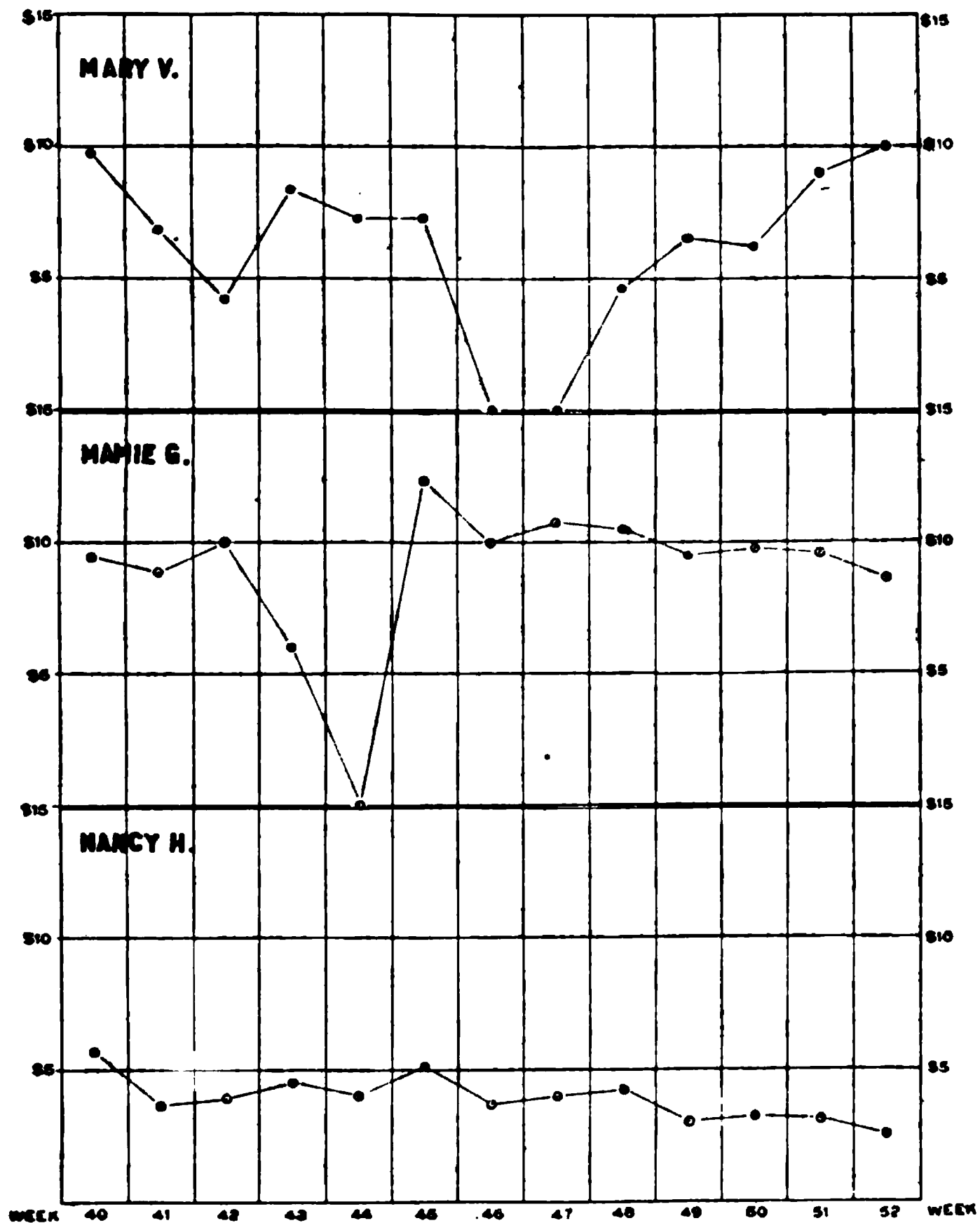


CHART XVI
CONFECTIONERY NEW YORK CITY,
WEEKLY WAGES OF THREE PIECE-WORKERS
FOR THREE MONTHS

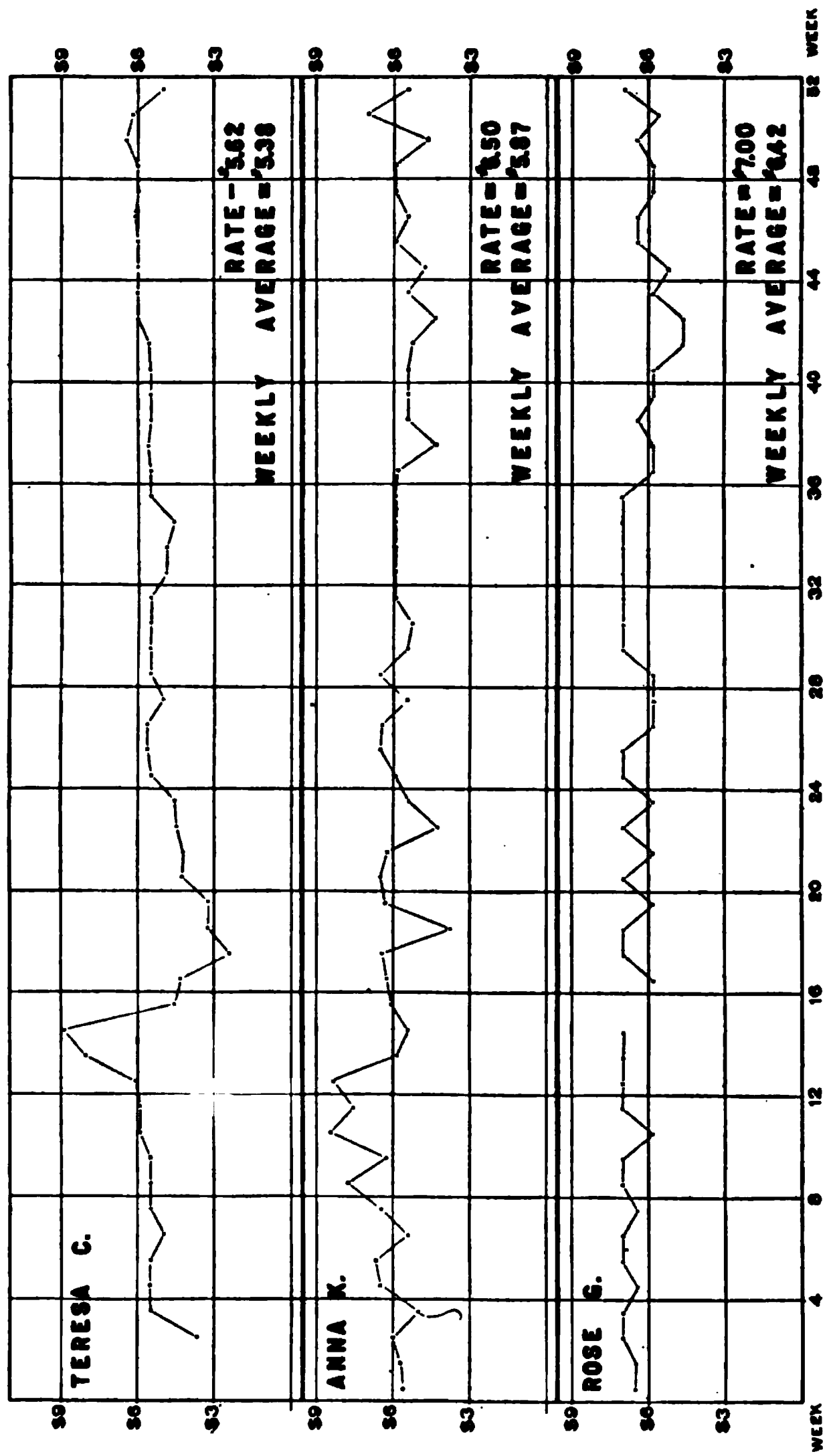


losses from irregular work are compensated in some way, therefore, how can we but question the effectiveness of insuring the women in it a living income by the usual minimum wage rate?

But in any average or aggregate extreme differences are smoothed down and the greater fluctuations disappear. If we want to realize the human side of the problem, how individual girls are affected by these wage differences, we must select individual workers and find out what they get week by week. As was done in the section on the Paper Box Industry, six workers were chosen, three piece workers and three time workers. They were "steady representative workers," each employed nearly the whole year in different factories. The three piece workers, Mary and Nancy and Mamie had an average weekly wage of \$7.10, \$5.69, and \$9.35, respectively. These averages conceal great differences from week to week as the Charts (XV and XVI) show. The first chart represents each girl's weekly wages averaged by months; the second, her wages week by week for the third quarter of the year (which is not highly irregular) in order to show the fluctuations concealed by a monthly average. Mary received as little as \$4.20 one week and as much as \$10.01 another. Nancy received only fifty cents one week. The next week she did not work at all. However, excluding this as possibly caused by personal reasons, another week she made \$2.91, while her best week she received \$8.79. Mamie's weekly wage varied between \$3.27 and \$14.37. Instead of the average 35 per cent. difference, we have 58 per cent., 66 per cent. and 72 per cent., as the difference between the largest and smallest weekly wages of these steady workers. The surprising fact to those unfamiliar with present day factory work, is that nearly as great a variation occurs in the wages of the three time workers as among the piece workers (see Chart XVII). Teresa is supposed to be paid \$5.62 every week in the year. In reality, her highest weekly wage is \$8.90 and her lowest \$2.44, a difference of 72 per cent. Rose's rate is \$7. She never gets more than this, but for two or three weeks, her actual wage falls as low as \$4.67, just about a third below her rate. Anna with a rate of \$6.50, gets a minimum of \$3.79 and a maximum of \$8.45, more than twice as much. Not one of the three "makes up in the busy season what she loses in the dull"

CHART XVII

CONFECTIONERY NEW YORK CITY
WEEKLY WAGES OF THREE TIME-WORKERS



as we are often told most workers do, for in each case the average weekly wage falls below the rate. Teresa drops below her rate an average of 24 cents weekly, Rose 58 cents, and Anna 63 cents. The average percentages lost weekly are 4 per cent., 8 per cent. and 9 per cent. Similar conditions among individual workers were found by the Massachusetts Commission on Minimum Wage Boards. They considered the case of "Bridget G" typical. She was 26 years old and had wrapped candy for one firm nearly seven years. Her weekly rate was \$6, but in 1911 industrial lay-offs brought her average weekly wage down to only \$4.97, a loss from her meager full time earnings of 17 per cent.

OVERTIME EARNINGS.

It is already evident from the constant deficit in earnings when compared with rates that the steady worker does not find her "gains from overtime" equalling her losses from undertime. There are two reasons for this. The first is simply that the dull season is longer than the busy one. A glance at the charts showing monthly changes in numbers and wages will confirm this. Roughly from these charts, the proportions of slack and rush work are 33 weeks to 17 weeks. Then also rate-workers always fall below their rate many more weeks than they climb above it. For instance, Teresa, one of those "representative workers" in New York City was 36 weeks below her rate and only 14 weeks above it. In the second place, not all employees work overtime; in California in 1911, a quarter of the candy workers did not and in Maryland in the same year a fifth did not. All facts point to the conclusion that it is not so easy to "gain from overtime and make up for the slack season," even if the necessary long hours were thought desirable.

SUMMARY.

Busy and dull seasons alternate in candy factories in the same way that they do in paper box factories. The industry is busiest in the fall, active before Easter and slack after Christmas and in the summer. On account of these seasonal variations, at least 25 per cent. of the whole number of women employed can find places in the trade only during the four fall months. Part of

the great flux of workers in the industry, therefore, is not the fault of the workers themselves. The steady workers also lose in time and consequently in wages during the dull season, both through shorter hours and through the occasional closing of a department or the whole factory for a few days. These losses in wages can be brought out in several different ways. There is a 35 per cent. variation in wages week by week in New York in contrast to a 25 per cent. fluctuation in numbers. In individual cases the difference rises as high as 75 per cent. These fluctuations result in wage losses. A comparison between the average weekly rate and earnings of over a thousand rate workers in New York City show that 89 per cent. of them did not make their rate and that their average loss was about 15 per cent. The same state of affairs was found to exist among "annual" workers and among women employed for shorter periods in Massachusetts.

The Minimum Wage Commission of that State has described a typical worker as "less than 25 years old, earns less than \$6 a week; works on an average less than 46 hours weekly, and is out of work twenty or more weeks during the year."

We can come therefore to but one conclusion about a minimum wage in the confectionery industry. In view of the seasonal nature of the industry, a minimum flat rate without regard to the amount of employment will never give the girl in the candy factory a living wage. Yet large numbers of them look to this industry alone for their support. The Massachusetts Commission, for example, reports that in spite of its irregularity, 68 per cent out of 900 workers questioned depended entirely on this one industry for a living. Nor can those girls who hold their places in the slack season well do otherwise, with the slack periods so scattered as they are, a day here and a day there; while, as has been said, the casual workers, dismissed after Christmas, have to hunt for work in a time when most other industries are also slack. A minimum wage in this industry, to give the women a "living income" must either build on a basis of greater regularity than exists at present, or make an adequate allowance for the losses from seasonal irregularity.

CLOTHING

INTRODUCTION

The seasonal irregularity of the various "needle trades" is notorious. For this irregularity, it is hard to say whether we should hold climate or human nature responsible. We naturally need different clothing for winter and summer. At the same time the custom of "something new for Easter" and the ever changing styles, especially in woman's clothing, tend to increase the concentration of retail trade in two short seasons, spring and fall.

Years ago retail buyers placed their orders for goods a long time before the selling season, and manufacturers, too, made up goods for stock, expecting to get orders when the season came around. This kept the employees at work the greater part of the time. Recently, however, the custom has become more and more prevalent for buyers to place their orders just before the selling season and frequently in smaller lots, at periods during the height of the season. Quick delivery is always expected. This produces a short rush season of overtime and overwork and then a long period of slack time with little or no work. A great number of women are affected by this extreme irregularity, for the "needle trades" are well to the front among industries employing women.

That all garment workers alike suffer from this cause is evident from the statistics of unemployment among union members in Massachusetts and New York. In Massachusetts the percentage out of work on the last day of each quarter is reported. This percentage, for the years 1910-12, averaged 9.2 per cent. at the end of the first quarter, 11.7 per cent. at the end of the second, 20.1 per cent. at the end of the third, and 38.7 per cent. at the end of the fourth. The general average for the three years was 19.9 per cent.

The New York figures for the same years run perhaps a little lower, but they are taken for the end of March and the end of September, when the trade dullness is by no means at its worst. Figures are also given to show that approximately 95 per cent.

of all the unemployment in this industry in New York state is caused by slack work. For women union members, the average number of days employed quarterly in the first and third quarters of a year, is also given. The full number of working days in a quarter is about 75, but from 1910 to 1912, these women averaged only from 39 to 64 days of work in a quarter, while 55 days is a representative figure for a general average. Roughly speaking they lost not far from a quarter of their time.

While idleness on account of trade conditions, therefore, is a burden to all garment workers, there is some difference in conditions between work on men's and women's clothing. The former includes the figures for such articles as bath-robcs, rain-coats and smoking jackets, staple lines for which the demand varies little and which can be made for stock if necessary. The workers on these goods are therefore little troubled by seasonal differences, and this fact, together with a somewhat more steady demand without very sharp changes in style, causes somewhat less irregularity in the manufacture of men's clothing than women's. On this account the two divisions of the trade are considered separately.

MEN'S CLOTHING

GENERAL STATISTICS

Few factory industries employ more women than does the manufacture of men's clothing. An average of 133,101 women, 16 years of age and over, were at work in this line in 1909, according to the United States Census of Manufactures. Ten years before the number had been only 99,000. Though the male workers were increasing somewhat more rapidly than the female and the proportion of women was therefore slightly decreasing, yet the women were still in the majority, forming 55 per cent. of all wage earners. The states employing the largest numbers of women workers on December 15, 1909, were New York with 40,000, Illinois with 19,000, Pennsylvania with 16,000 and Maryland with 10,000. Other States employing over 2,000 adult women were Indiana, Massachusetts, Missouri, New Jersey, Ohio and Wisconsin. New York held decidedly the first place, but the industry was fairly well scattered over the leading manufacturing states.

SEASONAL VARIATIONS

For the most part the fluctuations in the trade follow the familiar course of busy in the fall and in the spring, dull after Christmas and in the summer. On the whole, the spring busy season is more active and lasts longer than in many other trades with a correspondingly later and slighter rush in the fall. In a few localities, as Philadelphia and Baltimore, the first half of the year is a good deal busier than the last half. In Kentucky in 1911, the "Commission on the Condition of Working Women" found that at least three months a year were slack. Some employees are discharged as the slack season comes on, the rest work short hours, and on many days find the shop closed entirely, so that their earnings fall off.

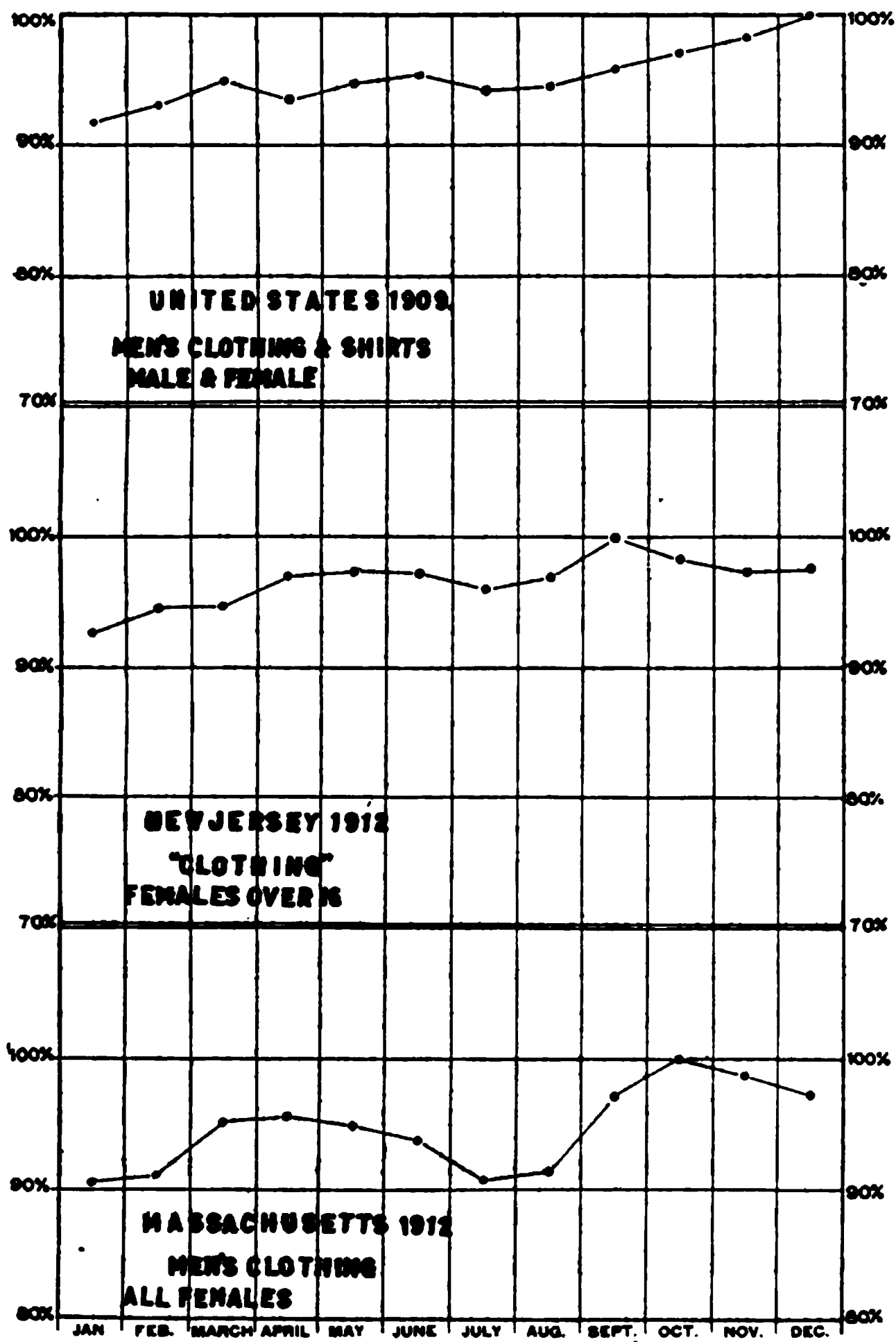
Sarah M. may represent the unlucky ones whom the industry cannot use all the year. She had been earning only \$3.50 a week, and then one day work was slack and her employer turned her off. For three months she could not get work. "She had saved \$6 and that partly paid for a place to sleep with a family about as poor as she was. She had lived for weeks on two cents worth of bread a day and a little tea, and after three months of this seemed surprised that she had 'queer feelings in the stomach' and palpitation of the heart. Her landlady sometimes cooked a supper for her, charging only 10 cents, which barely covered the cost of the food, did her washing, and helped her in every way she could."¹ Thus by the kindness of the poor to the poor were the vicissitudes of seasonal industry endured.

The case of Esther G.² illustrates the troubles of the worker who is not discharged outright in the slack season. But at that time she could get only enough work to bring her average weekly earnings of \$1.96. This did not pay her expenses, so "her landlady trusted her for her room rent, she used what little money she had to buy food, and when the busy season came again began to pay off the burden of debt which she had accumulated."

¹ Women and Child Wage Earners, Vol. V., p. 67.

² Ibid.

CHART XVIII
MEN'S CLOTHING
AVERAGE NUMBER EMPLOYED BY MONTHS.
(MAXIMUM = 100%)



STATISTICS OF IRREGULAR EMPLOYMENT

In the clothing trade the "average number of days in operation yearly" are somewhat more significant of the actual situation than usual because of the many days when the factories are entirely closed. In 1912, the average days in operation in Massachusetts was only 273 and in New Jersey, 233. That is, in Massachusetts the steady workers lost some 10 per cent. of their time from the closing of the whole factory for entire days and in New Jersey they lost nearly a quarter of their time in this way. Their full time earnings would be reduced proportionately from this one factor alone without allowing for all the short time on days when a little work is done.

Variations in the "average number employed by months" have been given for the whole United States in 1909 and for Massachusetts and New Jersey in 1912. (See Chart XVIII.) The differences are not extreme, about 10 per cent. at the most, though half of this difference or 5 per cent. can find places for only three months out of the year. In this industry, the busy and slack seasons may not come at the same part of the year in different localities and different sorts of shops, and whenever this happens, the average smooths down the differences. This is often the case, as the diagram shows, for the variations in New Jersey do not correspond with those of the United States as a whole. Some figures from a federal report on the industry make this still more evident. The five leading centers for the trade are considered, New York, Chicago, Rochester, Philadelphia and Baltimore, where altogether 68.2 per cent. of the men's clothing manufactured in the United States was turned out in 1909. Though according to the dates of the week when fewest and the week when most were employed the general tendency toward slack work in the summer and after Christmas and a busy season in the spring and late fall was clear, yet there was considerable variation between the different cities.

Still more striking are the differences in steadiness of numbers employed between the various cities and the various kinds of shops. (See Table 7.) The basis of comparison here used is the per cent. which the maximum and minimum numbers

form of the average number employed, instead of, as in other schedules, the per cent. which the smallest monthly average is of the greatest. In cities, Rochester, with only 16 per cent. difference between this smallest and largest per cent. of the average number employed, forced less unemployment on its workers than Philadelphia with its difference of 29 per cent., and far less than Baltimore with its difference of 54 per cent. Since percentages are given for only one shop in New York, no general deductions can be made for that city. In Kentucky, the Commission on the Condition of Working Women found a 50 per cent. difference in 1911 between the numbers in the busy and in the slack season. This greater steadiness of the trade in Rochester is probably due to the fact that the "inside" shop prevails there, that is, the large factory where a single firm controls the manufacture from beginning to end.

Regularity of work in the different kinds of shops may be compared from the Chicago figures. In the "inside shops," the difference between the largest and smallest number employed was only 8 per cent., a result similar to the general averages. But in two "contract shops," where a contractor has the clothing made up which he gets from an entrepreneur, the differences were naturally much greater, 17 per cent. and 32 per cent. Three "special order" shops were investigated, two in Chicago and one in New York. In a "special order shop" suits are made to individual measure, but under factory conditions. Such a shop is the link between custom tailoring and ready made clothing. Since work is done as the orders happen to come in, the irregularity there was greatest of all. In the two Chicago shops, the fluctuations were 51 per cent. and 90 per cent., and in the one in New York City the difference was 73 per cent. In these last two shops more than half of the workers must have been thrown out of employment for a part of the year. This is quite a different story from the 10 per cent. of the general average, and goes to show once more how such averages may cover up the real conditions.

TABLE 7
MEN'S CLOTHING—FIVE LEADING CENTERS OF THE INDUSTRY, 1907-8
 FLUCTUATIONS IN NUMBERS EMPLOYED, WEEKLY PAYROLL AND AVERAGE WEEKLY EARNINGS
 (Adapted from Woman and Child Wage-Earners, Vol. II, pp. 174-179)

KIND OF SHOP	PER CENT. OF AVERAGE NUMBER OF EMPLOYERS		PER CENT. OF AVERAGE WEEKLY PAYROLL		PER CENT. OF AVERAGE WEEKLY EARNINGS	
	Smallest	Largest	Smallest	Largest	Smallest	Largest
I. CHICAGO						
Large inside shops.....	95.3	103.6	85.9	112.9	85.0	112.5
"Contract vest shop," Scandinavian.....	88.6	120.0	67.5	112.6	76.2	112.3
"Contract coat shop," Bohemian.....	87.5	104.2	74.5	123.9	71.6	123.6
"Contract coat shop," German.....	.....	.....	56.5	135.9	.....	.....
Ready-made clothing....	95.3	103.6	85.9	116.3	85.0	112.5
"Special order shop"....	74.2	125.8	42.6	166.7	29.7	171.9
"Special order shop"....	28.8	118.0	47.8	128.0	25.2	146.4
II. ROCHESTER						
All.....	93.8	109.9	92.3	112.2	98.4	104.2
III. PHILADELPHIA						
All.....	79.1	108.4	47.2	125.2	54.3	117.6
IV. BALTIMORE						
All.....	72.1	126.6	55.6	131.3	63.4	118.6
V. NEW YORK CITY						
"Special order shop"....	52.2	125.8	32.1	158.2	55.1	138.0
"Inside contract shop"....	.....	.....	63.6	117.7	.....	.....

Besides the entire closing of the shops, brought out by the statistics of "days in operation" and the smaller numbers employed in the busy season, shown by the "number employed by months," there is the whole question of short-time which is much more common than might be thought. The government investigation already referred to computed for a "representative week" the average weekly hours actually worked and the actual average weekly pay and compared the results with full time hours and full time rates of pay. (See Table 8-a.) The percentage of loss in hours and that of loss in wages is almost identical and forms one more proof of the absolute dependence of factory-workers' wages on the number of hours they work. There was a decided loss from full time hours and full time rates of pay in every city, varying from about 10 per cent. in Rochester to more than 20 per cent. in Baltimore—and it must be remembered that this

period is supposed to be a "normal week"—rather busy than dull. Once more we can see the ineffectiveness of a wage-rate as a measurement of the actual pay received. Furthermore, there was absolutely no uniformity about the weekly hours that different women worked. (See Table 8-b.) In Chicago, in this same "representative week," 7 per cent. of the women worked overtime, but 41 per cent. less than full time. In one establishment of that particularly irregular type, the "special order house," over a quarter of the women worked overtime yet nearly a third worked less than three days in the selected week. It is impossible then under present conditions of irregularity to assume that all the workers will gain from possible overtime at busy seasons or will be able to reach any one level of wages.

TABLE 8
MEN'S CLOTHING — FIVE LEADING CENTERS OF THE INDUSTRY, 1907-8
A. FULL-TIME AND ACTUAL WORKING TIME, FULL-TIME WAGES AND ACTUAL AVERAGE WAGES
IN A "REPRESENTATIVE WEEK." WOMEN 16 AND OVER
(Adapted from "Woman and Child Wage-Earners, Vol. II, pp. 107, 125 and 161)

CITY	Average regular weekly hours	Average hours actually worked during week	Per cent. time lost during week	Per cent. wages lost during week	Computed full time earnings	Average actual weekly earnings for the week
Rochester.....	54.6	49.2	9.7	9.8	\$7 68	\$6 93
Chicago.....	54.3	48.4	10.9	11.0	8 03	7 15
New York.....	57.2	49.9	12.7	12.6	6 57	5 74
Philadelphia.....	54.6	47.4	13.2	12.9	6 89	6 00
Baltimore.....	57.7	45.8	20.6	20.6	6 07	4 82

B. PER CENT. OF WOMEN IN CHICAGO, 1907-8, WORKING OVERTIME, FULL-TIME, AND SPECIFIED
NUMBERS OF DAYS PER WEEK IN A "REPRESENTATIVE WEEK." WOMEN 16 AND OVER
(Adapted from "Woman and Child Wage-Earners, Vol. II, pp. 110-112)

KIND OF SHOP	Overtime	Full time	5 days— full time	3-5 days	Less than 3 days
All.....	7.5	50.8	11.7	20.9	9.1
"Special order" shop.....	27.1	11.3	2.2	28.1	31.3
"Ready-Made" establishment.....	3.4	59.0	13.8	19.1	4.7

SHIFTING

This same federal report finds that only 18 per cent. of the workers stayed in the factories investigated for a whole year. (See Table 9.) Sixteen per cent. remained from fifteen to thirty weeks, and the same proportion from thirty to fifty weeks, 20 per cent. from five to fourteen weeks, and 28 per cent.

less than five weeks. Workers remained longest in Rochester, then Philadelphia, Chicago and Baltimore followed in the order named. These cities have the same rank in variations in the numbers employed. It seems probable, therefore, that many workers, after a few weeks' work were forced out of the garment trade into other work or into unemployment.

TABLE 9
MEN'S CLOTHING — FIVE LEADING CENTERS OF THE INDUSTRY, 1907-8
PER CENT. OF EMPLOYEES REMAINING GIVEN NUMBERS OF WEEKS IN THE SAME FACTORY
(From Woman and Child Wage-Earners, Vol. II, p. 166)

NUMBER OF WEEKS IN SAME FACTORY	Rochester	Philadel- phia	Chicago	Baltimore	Total
Under 5.....	11.8	17.3	34.9	38.2	28.2
5-14.....	17.8	21.8	21.4	20.2	20.6
15-29.....	13.7	21.6	16.1	16.9	16.9
30-49.....	22.4	17.4	13.6	15.3	16.0
50 and over.....	34.3	21.9	14.0	9.4	18.3

VARIATION IN EARNINGS

Finally we come to the more important point, the effect of this seasonal irregularity upon earnings. For such wage fluctuations, though we have no one general set of figures, yet we have a few for the different kinds of shops in the leading cities of the trade, figures which are comparable to those of the fluctuations in numbers. First, this federal report gives the per cent. of difference between the largest and smallest total amount of wages paid out in different weeks during the year for all workers. Then, there is given also the percentage of variation between the largest and smallest average weekly wage. The latter may fairly be said to give an idea of the extent to which steady workers' earnings suffer from the irregularity of the trade. Except in Rochester, where there is only a 6 per cent. variation, these differences are always large. (See Table 7.) With these figures may be compared the results of investigation in Kentucky, where the Commission on the Condition of Working Women in 1911 found average weekly wages of \$5-\$6 in "normal" times, rising to \$6-\$7 during the busy season, but falling as low as \$1-\$4 for those having any work at all in slack periods.

The other set of variations, differences in the total pay-roll, result both from differences in the numbers employed and from changes in the amounts earned by the steady workers as well.

Naturally, then, fluctuations in wages are greater than the differences in numbers alone. (See Table 7.) In one instance, that of a "contract coat shop—Bohemian" in Chicago, where the number of workers varied only 17 per cent. from season to season, the wages varied 49 per cent., indicating the tremendous loss from slack time suffered by the steady workers.

Another estimate of the loss in earnings from short time and seasonal irregularity was made by the Wisconsin State Federation of Labor for union members in 1913. Among garment workers, both men and women, the actual average yearly earnings were \$432 and the computed full time yearly earnings \$512. The difference is 15.7 per cent. and this loss occurred among both sexes, including men who being the more highly skilled workers generally suffer less from irregularity, and among union members with whom trade conditions are always at their best.

WOMEN'S CLOTHING

GENERAL STATISTICS

A very large number of adult women are also employed in the manufacture of all kinds of women's clothing. A decline in home dress-making is evident from the great increase in the number of women wage-earners in this industry — an increase of 54 per cent. from the 56,000 employed in 1899 to the 97,000 employed in 1909. Proportionally, however, there was a slight tendency for men to replace women, but female employees were still decidedly in the majority in 1909, being 63 per cent. of the whole working force, though in 1899 they were about 68 per cent. The trade is extremely concentrated, centering in New York City, where nearly 59,000 — over half the total number of women workers — were found on December 15, 1909. The next state, Pennsylvania, was a long way behind with only 11,000 and Ohio came third with only 6,000. Conditions in New York City, then, may well be considered in detail.

SEASONAL VARIATIONS

There are no staple articles comparable to those in men's clothing, made in the woman's clothing trade which feels the full effect of rapid changes in style and of an eager demand at two

short seasons of the year. In the spring as many employees as can be gotten together work long hours, frequently overtime, under high pressure. Then work drops off, till July can only be described as "dead." The trade begins to pick up again in August and is busy through the fall, though hardly as intensely so as in the spring. By the end of November most women have bought their winter outfits, and everything is slack again till February. The result of these two busy and two dull seasons is that many women can find work only a small part of the year, and that the rest see their wages drop off and find the shops closed entirely for many days during the slack season. Dr. Woods Hutchinson, studying the situation in the dress and waist industry in New York City in 1910 described it as "good work for four months, moderate for six, and very little for two months out of every year." The case of Rachel, a shirt-waist operative, cited by Mrs. Clark and Miss Wyatt in "Making Both Ends Meet," illustrates how this affects a woman's wages. For four months she could get full time work and earned \$14 or \$15 a week. For three months she worked only five days a week, earning about \$12. Four months more she worked three or four days and earned only \$7-\$10 weekly, and one month she could get no work at all. Her average weekly wage when the whole year was considered was little more than \$10, a third less than what she could make with full-time work.

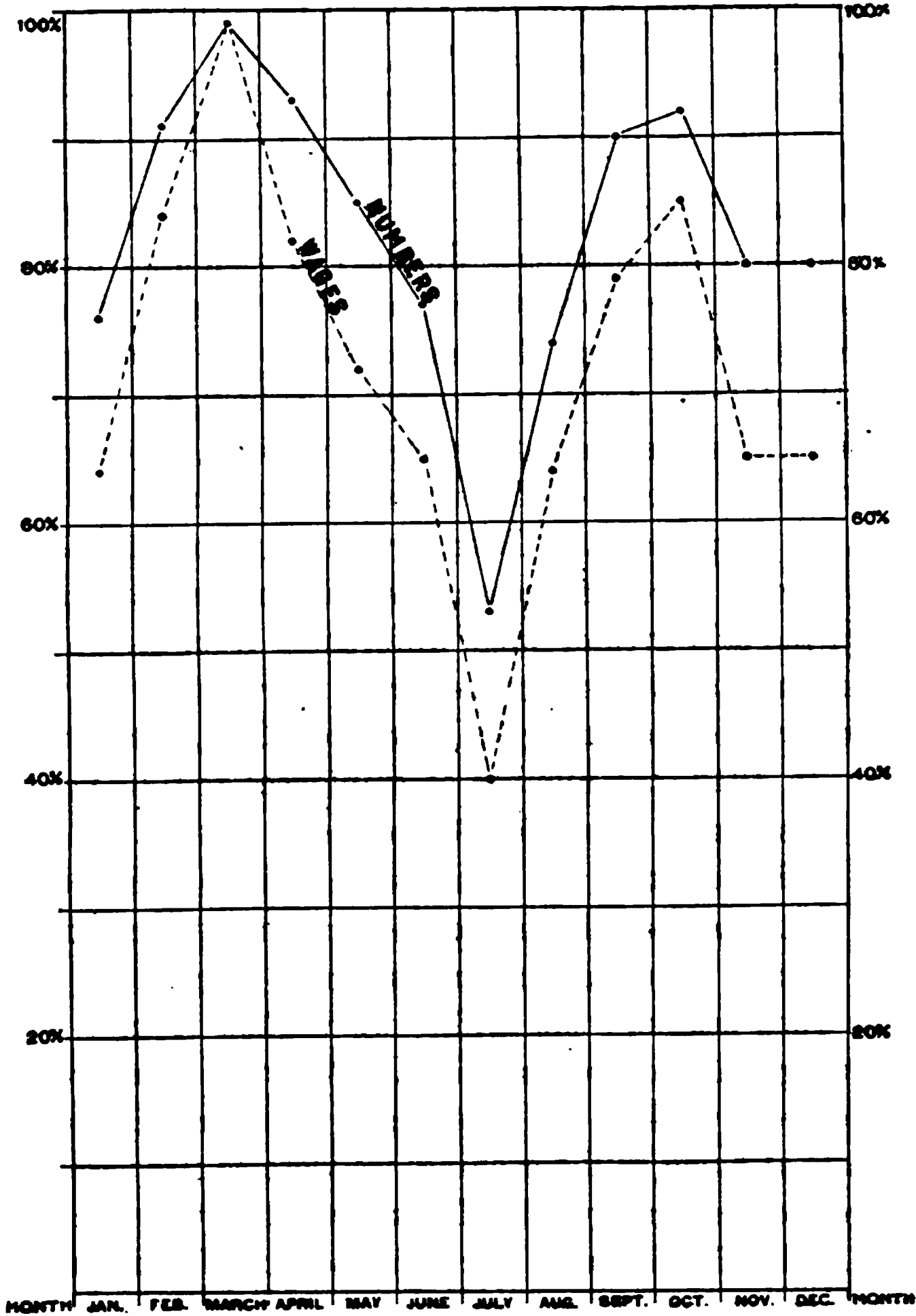
STATISTICS OF IRREGULAR EMPLOYMENT

Many women are even worse off than Rachel, for she was entirely out of work only one month in the year. The general situation is shown by the variation in numbers in the dress and waist industry in New York City in¹ 1912. (See Chart XIX.) These figures show that in July half the employees in the industry were out of work and for three months more, June, August and January, a quarter of the largest number employed could not find places. This situation is apparently worse than are conditions in those states where the trade is only slightly developed, since the variation from the maximum in the latter was smaller, only 15 per cent. in Wisconsin and New Jersey for two months a year,

¹ U. S. Department of Labor, Bulletin No. 146, p. 150.

CHART XIX
DRESS AND WAIST INDUSTRY, NEW YORK CITY, 1912
AVERAGE NUMBER EMPLOYED AND TOTAL AMOUNT
WAGES BY MONTHS. MALE AND FEMALE.

(MAXIMUM = 100%)



and 25 per cent. in Massachusetts during two months. (See Chart XX.) The drop in wages was even greater than the drop in numbers, the difference, as has been said, indicating what the steadiest workers lose from slack time. Only 40 per cent. of the largest amount of wages was paid out in July and about 65 per cent. in January, June and August. These figures indicate a loss from short-time of not less than 10 per cent. or 15 per cent. of the wages of the steady workers.

SUMMARY

In the manufacture of clothing, the rush season is the spring and the slackest the summer. January is somewhat dull and the fall is busy. On the whole, the women's clothing industry is more irregular than the men's. The nation-wide variation in the number employed from month to month is only 8 per cent.¹ in the latter, but a closer examination, week by week, of different sorts of shops and different localities, discloses differences of from 16 per cent. to 54 per cent. These figures bring out the large numbers of women who are necessarily unemployed during part of the year; the still greater wage differences from season to season show that the steady workers lose from short time. In the manufacture of women's clothing in New York City, the center of the industry, in 1913, the number of employees fell 45 per cent. in the dull season and wages fell 60 per cent.

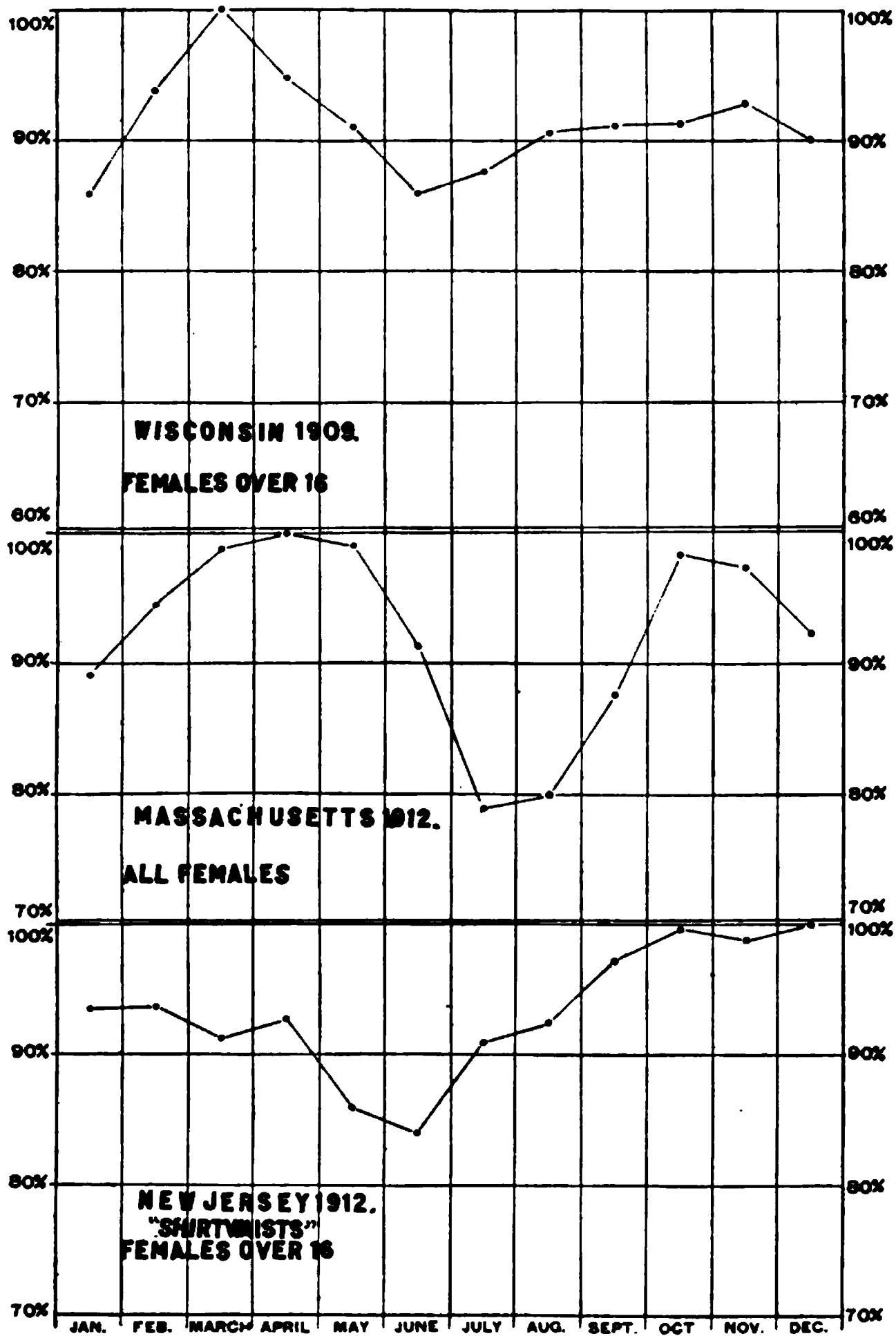
What is the result of this alternation of high pressure and lack of work on the women themselves — on their lives as well as their wages? It may be summed up in the words of an operator herself. "In the rush season," she said, "we worked from 8 o'clock in the morning till 9 o'clock at night. We only went from bed to work and from work to bed again, and sometimes if we sat up a little while at home in the evening, we were so tired we could not speak to the rest and we hardly knew what they were talking about. And still, although there was nothing for us but bed and the machine, we could not earn enough to take care of ourselves through the slack season."²

¹See Chart XVIII.

²"Making Both Ends Meet" by Edith Wyatt and Sue Ainslee Clark, p. 132.

CHART XX
WOMEN'S CLOTHING
AVERAGE NUMBER EMPLOYED BY MONTHS.

(MAXIMUM = 100%)



All legal minimum wage rates in the United States thus far are weekly rates. How far this kind of wage award would come from providing a living wage to a garment worker is shown by the case of "Rachel," previously mentioned, who, though a steady, experienced worker, had an average weekly wage for the year falling a third below her full time rate. Any adequate minimum wage rate in the garment trades must make an allowance for this loss from slack work, and 25 per cent. would not be too high a figure for such an allowance. If, in this way, financial pressure was brought to bear upon the employer to give steady employment to perhaps fewer people and to end the tension and overwork of the busy season, not only the pocketbooks, but the health and nerves of the workers and thereby the community would profit greatly.

SHIRT-MAKING

GENERAL STATISTICS

Owing to the steadier demand and more staple nature of the product, the making of shirts is one of the less seasonal of the industries grouped as "needle trades." In the north the business varies considerably from season to season, but hardly to the same degree as do most other branches of clothing manufacture.

In the latest United States Census of Manufactures, taken in 1909, the figures for "shirts" are combined with those for "men's clothing," so that exact statistics about the number of women wage-earners in the industry cannot be given. The census estimated, however, that there were about 48,000 wage-earners employed in shirt-making and that probably three-quarters of those were women. New York is the leading state in the industry employing about 22,000 females.

STATISTICS OF IRREGULAR EMPLOYMENT

In Massachusetts in 1912 the "average number employed by months," showed a considerable drop in the number of women wage-earners in June, July and August. The numbers fell in August as much as 25 per cent. below the maximum. In New Jersey in the same year, there was a falling off of nearly 10 per cent. during the same three months. In Massachusetts, the numbers during the rest of the year remained steady, but in New Jersey a higher level was reached during the first months of the year. A federal investigation in 1911 likewise found marked busy and slack seasons in California and Maryland factories.

In New York state, according to the recent and extensive study of the trade carried on by the New York State Factory Investigating Commission for the year beginning December 15, 1912, the seasonal variation of the industry in New York City was not wholly identical with that in other parts of the state. This is due largely to the different lines of goods manufactured in the city and upstate. In New York City the principal prod-

uct is cheap work-shirts, a relatively staple product, so that the busy season is there distributed over a large part of the year, not following exactly the familiar course of busy in the fall and spring, slack after Christmas and in the summer. Upstate, however, the seasonal variations are greater and more frequent and the summer is distinctly dull.

From this investigation the monthly and weekly fluctuations in numbers employed can be obtained. These statistics, together with the variation in amount of wages by months, are presented graphically in Chart XXI. In the city the numbers fell in March 13 per cent. below their highest point which came in November, while upstate the maximum number was also at work in November, but the smallest number of workers, 17 per cent. below the maximum, was found in August. As usual, the fluctuations by weeks were greater than by months. In the city, weekly variations were 15 per cent. instead of the 13 per cent. by months; and upstate weekly variations were 31 per cent. while the greatest monthly variation was only 17 per cent.

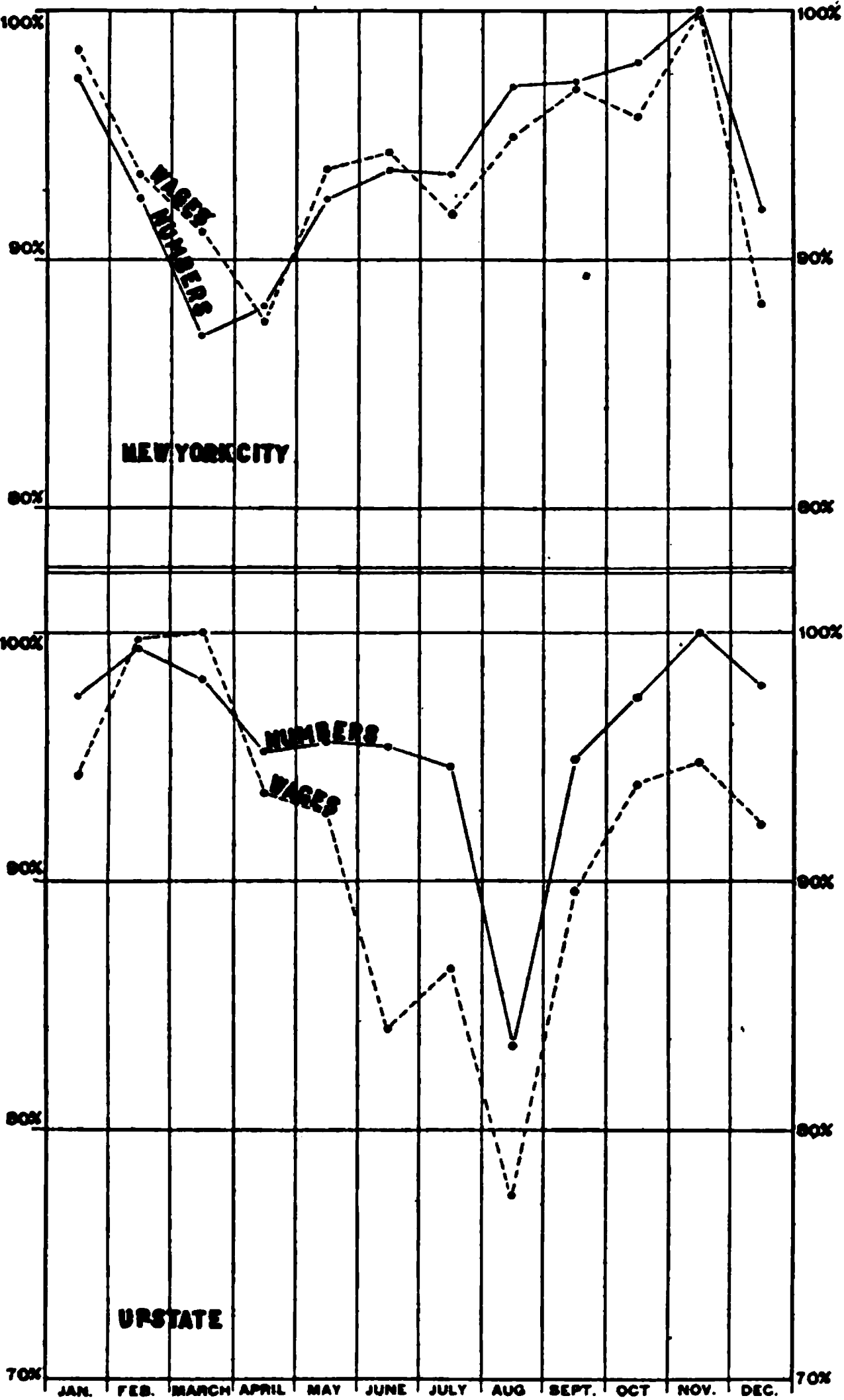
Interviews with selected women workers by the New York State Factory Investigating Commission showed in a large number of cases, time lost for industrial reasons. While out of 94 women interviewed upstate, 10 lost no time whatever, among the remaining 84, there were 45 instances of loss of time for industrial reasons, averaging eleven days each. Among 177 women in New York City, 18 were entirely out of work for from one week to six months and 70 lost from one week to four months on account of slack work. There were 102 women who reported a loss of time from industrial reasons and their average loss of time was 34 days, over a tenth of the possible number of working days in the year. But since most of the workers are employed at piece-work, no variation in numbers is an adequate measure of the full extent of the irregularity. Shirt-making is another industry in which earnings must be studied in order to understand the full effect of seasonal irregularity.

SHIFTING

There is some evidence to show a similar flux of workers in the shirt-making industry to that found in so much other factory

CHART XXI
SHIRT-MAKING
NEW YORK, DECEMBER 1912 - DECEMBER 1913
AVERAGE NUMBER EMPLOYED AND TOTAL AMOUNT
WAGES BY MONTHS. MALE AND FEMALE

(MAXIMUM = 100%)



work. In one New York factory whose pay-rolls could be checked back for a year, the State Commission found that 17 per cent. of the workers had remained less than four weeks, 24 per cent. more, from five to sixteen weeks and but 29 per cent. had stayed 49 weeks or longer.

VARIATIONS IN EARNINGS

The most adequate measure of seasonal variations in shirt-making is therefore the fluctuations in wages. Both in New York City and up-state, the changes in the amount of wages paid out at different seasons are greater than the changes in numbers. By months, wages in the city were at their lowest point in April, when they were $12\frac{1}{2}$ per cent. below the maximum, while up-state the greatest decline was 23 per cent. in August (see Chart XXI). By weeks the differences are considerably larger, being approximately 19 per cent. for the city and very nearly 40 per cent. for the rest of the state. The proportionately greater decline in wages than in numbers is of course mainly the result of short-time in reducing the wages of employees who remain on the pay-rolls during the dull seasons.

Even in these totals, combining as they do many different establishments, the extreme fluctuations in individual factories are undoubtedly smoothed out to a considerable extent. Such is the conclusion to be drawn from the large variation at different seasons in the average wage of women workers questioned on this point by the State Factory Investigating Commission. In New York City where the greatest weekly variation in wages was about 19 per cent., the average weekly wage of 197 women workers was \$7.39 in rush seasons and only \$5.13 in dull seasons, a difference of 25 per cent. Between dull and "normal" seasons alone there was a falling off of $6\frac{1}{2}$ per cent. in wages. Out of 85 women workers up-state, 14 reported no difference in their wages from season to season, but the others received average weekly wages which were 12 per cent. lower in dull than in "normal" times, twice as great a difference as in the city. No figures as to rush seasons were given.

SUMMARY

Shirt-making, then, is irregular like other needle trades, and this seasonal irregularity is reflected to some extent in the numbers employed at different parts of the year. Fifteen per cent. fewer than the maximum were employed in New York City in the dullest week of 1913, and 31 per cent. fewer in the rest of the state. It is a study of earnings, however, which best brings out the extent of seasonal variations, for even those who hold their places during dull seasons suffer considerable wage-losses from short-time. Wages declined 19 per cent. in New York City in the dullest week of 1913 and very nearly 40 per cent. in the rest of the state. Under these conditions, the fixing of a minimum weekly wage rate alone would not necessarily provide an adequate annual income to the woman worker.

MISCELLANEOUS NEEDLE TRADES

INTRODUCTION

The same causes — a greatly increased demand at two seasons of the year, style changes, and a consequent reluctance on the retailer's part to place his orders far in advance,— produce great seasonal irregularity in every subsidiary line connected with the manufacture of clothing.

MEN'S FURNISHINGS

There is the manufacture of "men's furnishings," so called, under which is included collars and cuffs, suspenders, belts, neckties, etc. Nearly 30,000 adult women found employment in this industry in 1909 and about half of these were in New York state. The evidence obtainable shows here, too, dull seasons after Christmas and through the early summer till the first of August. In Massachusetts during the six months of January, February, April, May, June, and July, 1912, the number of women employed fell off from a quarter to a third. March was comparatively busy. Besides this, the factories were open on the average only 273 days out of a possible 305, so that even the steadiest workers must have lost at least a tenth of their working time and full-time wages. A union official in New York City,¹ describing similar conditions among the women workers on men's neckwear in 1913, said that they have to expect slack work after Christmas and in the summer, amounting to at least nine weeks in all or a sixth of the whole year. At these periods what little work there is is divided equally among them, so they do not lose on an average quite a sixth of their wages, but of course in this slack season their pay falls far below its usual level.

VEST MAKING

In vest making women are employed only for the most unskilled tasks. This condition differs from other work on men's garments and should therefore be considered separately. Most

¹ Mary Dreier in *Life and Labor*, December, 1913, p. 358.

of these women are out of work for three months every year, thus reducing by a quarter their already scanty wages of \$5-\$8 a week.

DRESSMAKING

This industry is one of the older occupations for women in which a very large number, estimated at 40,000 for New York City alone, are at work. Here in the city, the more important type of worker is no longer the dressmaker with two or three girls sewing for her, nor the "sewing women" going out to work by the day, but instead, the employee of the large custom dressmaking establishment or custom department of a big retail store. Much specialization and an absence of any personal contact exist — in other words, factory conditions. The busy seasons in such shops are the usual ones, fall and spring, October and November, March and April. Particularly in the spring rush girls may be asked to take work home and finish it or to work at the shop two or three evenings a week. The reverse of the picture is more or less slack time after Christmas and, almost inevitably, unemployment during the summer. The better shops may tide things over in January, laying the women off in relays, or possibly not at all, but all firms alike turn off the great majority of their force in the summer. An investigation made in New York City in 1909 revealed the fact that a quarter of the dressmakers questioned had been out of work three months or more during the year. The following instances are typical. "Elsie,¹ a young, capable, energetic girl, was working in the same shop for the third season at \$6 a week. She was laid off from July 4 to September 10. Mildred who had received special trade training, held her first position from February to June, getting \$5 a week. Then she was idle about three months, but in September began work in another place at \$7 a week, where she had to work overtime until 8 p. m. several days every week." Dressmakers are generally paid a flat weekly rate, so there is but little possibility of increasing their earnings by overtime work. Their nominal rate of pay is given as \$5-\$9 a week, but when allowance is made for the loss of from two to four months yearly, from a sixth to a quarter of their working time, their real weekly rate is lowered to from \$4 to \$8 instead.

¹ "Irregularity of Employment of Women," by Louise C. Odencrantz, in the Survey, May 1, 1909. p. 207.

MILLINERY

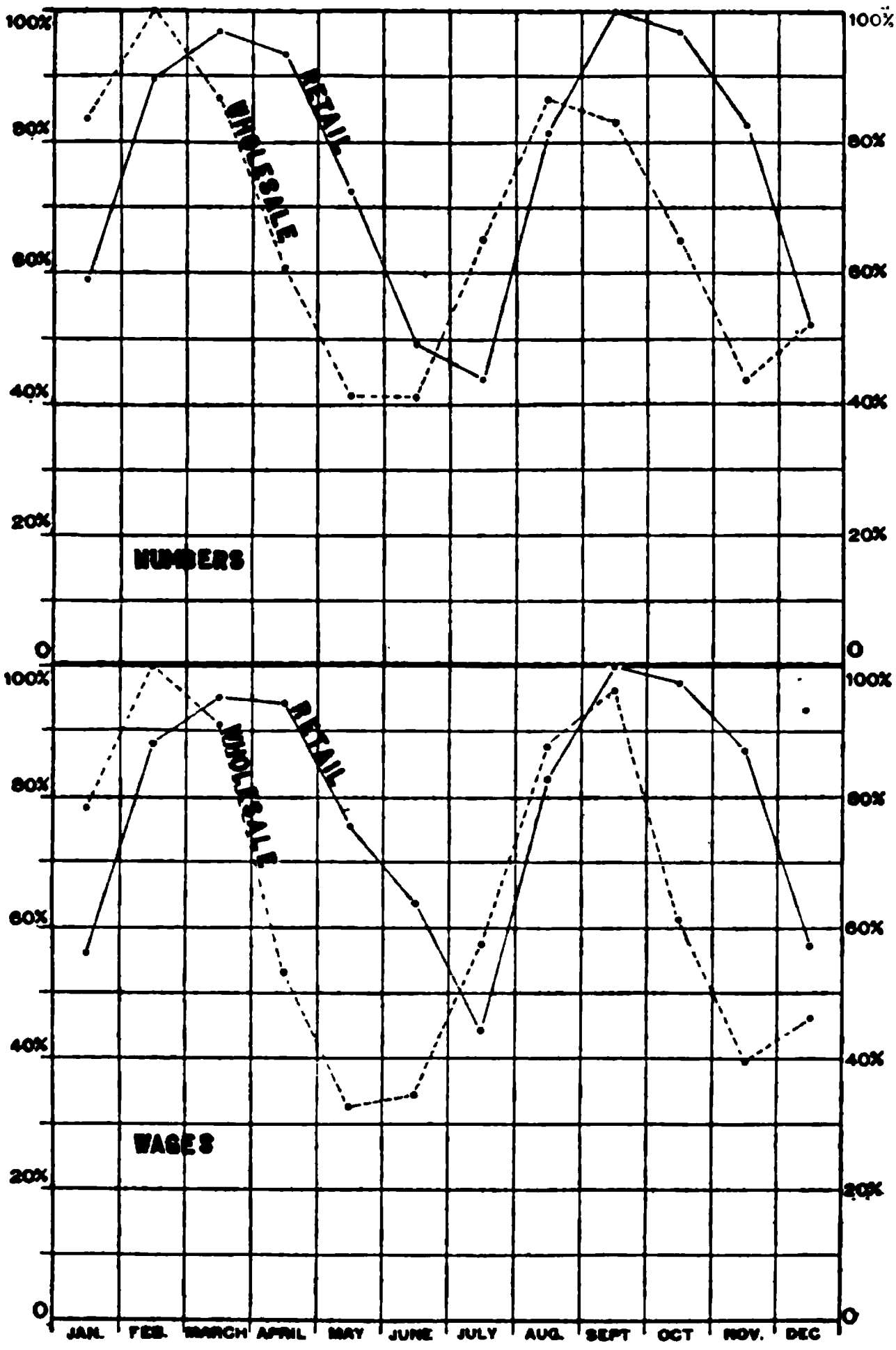
In the millinery trade the problem of irregularity of employment is even more acute. There are nearly 125,000 women milliners in the United States and 16,000 in New York City alone according to the 1910 Census of Occupations. A large part of these women can get work in their trade for only half the year. An investigation of a large number of firms in Manhattan in 1913¹ found that during the year, the number of employees was less than 25 per cent. below the maximum, only 25 weeks in the smaller retail establishments, 31 weeks in the larger ones, and 21 weeks in the wholesale houses. Naturally the busy season begins somewhat earlier in the great wholesale establishments where hats are made and trimmed for the retail trade than in the retail shops themselves. Wholesale firms commence to make up felt hats as early as July and end their work usually by November or before; work on summer hats begins the first of January and is generally over by the first of May. Work in retail stores begins and ends generally about a month later. This is well illustrated by the number employed monthly during 1913 by the Manhattan firms previously mentioned, where the range was from 259 to 591 in the retail trade and from 468 to 1,141 in the wholesale trade. (See Chart XXII.) The best months of the spring season for the wholesale firms were February and March but for the retail trade they were March and April. In the fall the wholesale trade was most active during August and September, whereas the retail houses were most active in September and October. Large as the differences are by months, they are even greater for separate weeks through the year. In both branches of the trade, the smallest number at work in any one week was only 37 per cent. of the largest number. It is, however, very difficult for the girls in the wholesale houses, who are in the majority in numbers, to lengthen each season a month by going into retail shops. In the first place, the work is on a different basis. The retail worker is paid time wages and quality is emphasized, whereas most of the wholesale houses pay on a piece basis so that quantity of output becomes the im-

¹ Made by the Committee on Women's Work of the Russell Sage Foundation in co-operation with the State Factory Investigating Commission. See page 361, *supra*.

CHART XXII

MILLINERY, SELECTED FIRMS, MANHATTAN, 1913.
AVERAGE NUMBER FEMALES EMPLOYED AND
TOTAL AMOUNT OF THEIR WAGES, BY MONTHS.

(MAXIMUM = 100%)



portant consideration. Then by the time the wholesaler is thrown out of work, the height of the season in retail houses is past, and a reduction in their force has already begun so that additional workers are seldom needed.

It is true that milliners, like so many other women workers, make many changes from one position to another. Out of 3,983 women employed in the course of a year, this New York City investigation of 1913 found that only 672 or 17 per cent. of the total number remained 40 weeks or more in the same position, 52 per cent. stayed eight weeks or less and 19 per cent., more than the number who stayed 40 weeks or over, were in the same position a fortnight or less. The lowest paid were found to change the most frequently. But it must be remembered that the highly paid designers and forewomen are by far the more likely to be retained during the dull season, and, knowing that from 60 to 75 out of every 100 milliners are necessarily unemployed during that time, we must lay the responsibility for most of this shifting to the short seasons of the trade and not to the restlessness or inefficiency of the workers.

The spring rush season, with everybody anxious for a new Easter hat, is the busiest time of the year. At that time late orders from customers in the retail trade frequently cause overtime and Sunday work which is seldom paid for. However, those few retail workers who keep their places throughout the year, being paid a flat rate, lose little from short-time. The Manhattan investigation of 1913 showed that the minimum amount of wages paid out week by week through the year to the retail workers studied was 33 per cent. of the maximum amount which is only slightly below the 37 per cent. difference in numbers. On the other hand, wholesale workers whose wages are on a piece basis of course gain from the rush to some extent, but even the minority who are kept on in the dull season suffer wage losses from short-time during that period. This is indicated by a fall in the total amount of wages to only 29 per cent. of the maximum while numbers fall to 37 per cent. (See Chart XXII.) But the average weekly returns of any woman milliner become very meager, when they are halved, as should be done to allow for a lack of work during half the year.

The Alliance Employment Bureau in New York City, which has had wide experience in placing girls as milliners, considers that only 20 per cent. or less of all milliners can hope for steady work the year round. From the height of the season there is a gradual reduction, then at the end the few who are left are also laid off.

The Bureau found in 1907 that only four out of fifty-seven trade school graduates were able to stay with the same firm a year or more without more than one month of enforced idleness. Finally, the industrial histories of two milliners, both girls with special training, will illustrate how this irregularity affects thousands of individual women, exposing them to all the difficulties and dangers of irregular work and uncertain pay. (See Table 10, A and B.) Ten positions in three years or six positions in little more than a year, with long periods of idleness into the bargain, represent that most undesirable and demoralizing condition, the life of the casual worker, and emphasize the conclusion of the Manhattan investigation of 1913 that in order to provide a living income through the year for milliners, not only a weekly minimum wage rate, but also lengthened seasons are of paramount importance.

TABLE 10
MILLINERY—NEW YORK CITY
A. TRADE HISTORY OF A MILLINER, 1907¹

No. position	Number months employed	Trade	Kind of work	Weekly wage	Reason for leaving
1...	6	Millinery (retail, Patterson, N.J.)	Apprentice.....	None.....	Family moved to N. Y.
2...	3	Millinery (whole-sale).....	Improver.....	\$6 (piece)....	"Laid off," slack season
3...	1	Millinery (retail)	Learner.....	\$9 (time)....	"Laid off," slack season
4...	2	Making handkerchiefs.....	{ Learner..... Operator.....	{ \$5.50 (time).. \$5-\$6 (piece)..	{ To return to millinery
5...	4	Millinery (whole-sale).....	Maker.....	\$8-\$10 (piece).	"Laid off," slack season
6...	2	Medicines.....	Wrapper, labeler.	\$5 (time)....	To return to millinery
7...	3	Millinery (whole-sale).....	Maker.....	\$8-\$14 (piece).	"Laid off," slack season
8...	3	Medicines.....	Wrapper, labeler.	\$5 (time)....	To return to millinery
9...	4	Millinery.....	Maker.....	\$8-\$14 (piece).	"Laid off," slack season
		5 months out of work			
10...	3	Magazine bindery.....	Folder, etc.....	\$6 (time)....	Idle half of each month

¹ From Annual Report of the Alliance Employment Bureau, 1907, p. 12.

B. TRADE HISTORY OF A MILLINER¹

No. position	Dates employed	Kind of Work	Weekly wage	Reason for leaving
1.....	Oct. 1–Nov. 15.....	Millinery...	\$4	Slack work
2.....	Nov. 15–Dec. 1..... 1 month out of work.	Millinery...	\$4	Slack work
3.....	Jan. 1–Jan. 15.....	Millinery...	\$5	To return to previous place
4.....	Jan. 15–May 1..... 2 months out of work.	Millinery...	\$5	Slack work
5.....	Aug. 1–Nov. 1.....	Millinery...	\$5	Slack work
6.....	Nov. 1.....	Office work.	.....

¹ See "Irregularity of Employment of Women," by Louise C. Odencrants, in the Survey, May 1, 1909, p. 199.

ARTIFICIAL FLOWER MAKING.

Other sorts of manufacture connected with the millinery trade are likewise highly irregular. The making of artificial flowers and fancy feathers is concentrated in New York City, over nine-tenths of all the adult women employed being found here. Miss Van Kleeck's exhaustive study summarizes conditions as "three or four months of slack work every year, its varying extent depending on whether or not flowers are a fashionable trimming for winter hats. Then four girls out of five are out of work."¹ She found only 873 women employed in the slack season, 19.5 per cent. of the 4,470 working at the height of the season and even this small minority worked part time and at *reduced rates*. This last is an unusual method of reducing the amount of wages during the slack season. The average weekly wage for weeks worked for those women who had a year or more of trade experience was found by this investigation to be \$7.76. On this basis their average yearly income should be approximately \$400. But as a matter of fact, half of these women had annual incomes of less than \$300. The resulting wage-loss of \$100, 25 per cent. of the computed full-time wage, must be ascribed mainly to slack work. But few gains from overtime are possible, since home-workers take most of the extra work during the busy season. The trade is least irregular when the manufacture of fancy feathers is combined with the flower making, but at the best "June is dull and the fall uncertain."²

¹ "Artificial Flower Makers," by Mary Van Kleeck, p. 41.

² Ibid, p. 54.

STRAW SEWING

Another branch of the trade is straw-sewing, by which is meant the sewing by machines of straw braids for hats. In this line a majority of the employees are women. Practically all the work is done in five months of the year, December, January, February, March and April and then almost all the force is dismissed. This is one of the most glaring examples of seasonal irregularity existent, but the problem is made less acute by the comparatively small numbers involved and the high wage level. At present women operatives can average \$15-\$30 a week through the brief busy season though it is said a cut in wages is an ever present menace.

FRENCH EDGE WORK

With the present styles in millinery, many of the factories making straw hats have filled in during the spring and summer with "French edge work." This is the finishing of the rolled edges of velvet hats, and is highly skilled, highly paid machine work. The season for this is also about five months, closing a little before the straw-sewing begins. Unfortunately it often proves extremely difficult for the same operatives to master the knack of both these trades.

FUR AND FELT HATS

Only about a quarter of the wage-earners employed in the making of "fur and felt hats" are women. All figures combine the making of men's and of women's hats, and as the demand for men's hats is not concentrated in one part of the year to the same degree as that for women's, the irregularity of the trade is thus reduced. The statistics, however, show a decided drop in the number of women employed during the half of the year from April through August or September. In Massachusetts in 1912 this difference was about 25 per cent. in April, 66 per cent. in May, about 33 per cent. in June and July, and 25 per cent. in August and September. Moreover, in Massachusetts, the factories are entirely closed for many days yearly, which means a large loss of time and earnings to the steady workers. In 1912, there was an average loss of 53 working days or 15 per cent. of the

working year for each establishment, by this inadequate method of measurement alone. When we add to this the short time not brought out by these statistics but which almost always precedes the entire closing of any factory, we see that the steady worker as well as the casual one, must suffer seriously from seasonal irregularity.

BOOK BINDING

GENERAL STATISTICS.

The Census of Manufacturers for 1909, stated that an average of 57,926 women 16 years of age and over were employed in the printing and publishing business in 1909. This number was 22 per cent. of all the wage-earners in that industry. It represents a slight proportional increase from 20 per cent. in 1899 and a large increase in numbers over the 39,868 women of that year. The number of women in the trade increased 45 per cent. during the decade while the number of men increased but 32 per cent. According to figures of the Census, then, the women tend to displace the men workers to some extent. While bookbinding is but one of several lines of work included under this general head, it is in binderies that many of these women are employed, and as "bindery girls" they must be added to the long list of women workers whose employment is irregular.

SEASONAL VARIATIONS.

These bindery girls suffer comparatively little, however, from the usual seasonal irregularity. There is likely to be an increase of work before Christmas and sometimes in the spring, while the summer is apt to be rather dull. Yet these changes are not sharply marked in many localities and classes of establishments, and, as a result, the number of workers does not vary very greatly during the year. Eight or nine out of every ten book-binders can hope to hold their places the whole year through. Irregularity in this industry comes through the erratic hours of the trade. The work is done just as the orders come in, so weekly or monthly in the case of periodicals, quarterly sometimes as with telephone directories, or at wholly irregular intervals will come a short period of long hours, of overtime, and perhaps night work, followed by another comparatively short interval of slack work or entire unemployment. Both the New York cases testing the constitutionality of the law prohibiting night-work for women, the Williams case in

1907, and the present Schweinler Press case, involve bindery girls. This alternation of long hours with short ones, or no work at all, causes the women's wages to vary correspondingly, and the net result of it all, it can be shown, is a loss in both time and wages. Investigators have found like conditions in the trade in New York City, Philadelphia, Pittsburgh, and Kansas City.

STATISTICS OF IRREGULAR EMPLOYMENT

Under such industrial conditions, the measurement of trade irregularity, "number of days in operation yearly" is of no importance; 301 is the average number of days in operation yearly of all book-binding establishments in Massachusetts, 1912; for New Jersey in the same year the same figure is 300. This simply means that some variety of work done in these establishments is always going on and that some of the men and women are always employed.

The varying numbers employed at different seasons of the year is much more significant in some parts of the country than in others. In New York City in 1910-11 this difference ran as high as 25 per cent. and in Kansas City in 1912-13, it was 20 per cent. but in Massachusetts in 1912 and in Philadelphia, 1914, it was only 12 per cent. In Massachusetts the smallest number were at work after Christmas and the largest number in the late summer; in Philadelphia the busiest period was before Christmas and the slackest during June and July. Seasonal irregularity and the resulting casual work are in some cases a rather important factor, but nowhere an adequate measurement of the entire extent of irregularity in the industry.

In order to gain a more complete idea of its seriousness we must turn once more to short time and the consequent reduction of the earnings of the steady worker.

While Miss Van Kleeck, in her study of book-binding in New York City, 1910-11, found, as has been said, that only 76 per cent. of the women workers could have places the year round, she also found that 73 per cent. of the workers lost more or less time from lack of work during the year. The entirely irregular character of the losses, a few hours here and a few there, or an odd number of days, is reflected in the fact that a quarter of the women, the largest group suffering from unemployment, lost some

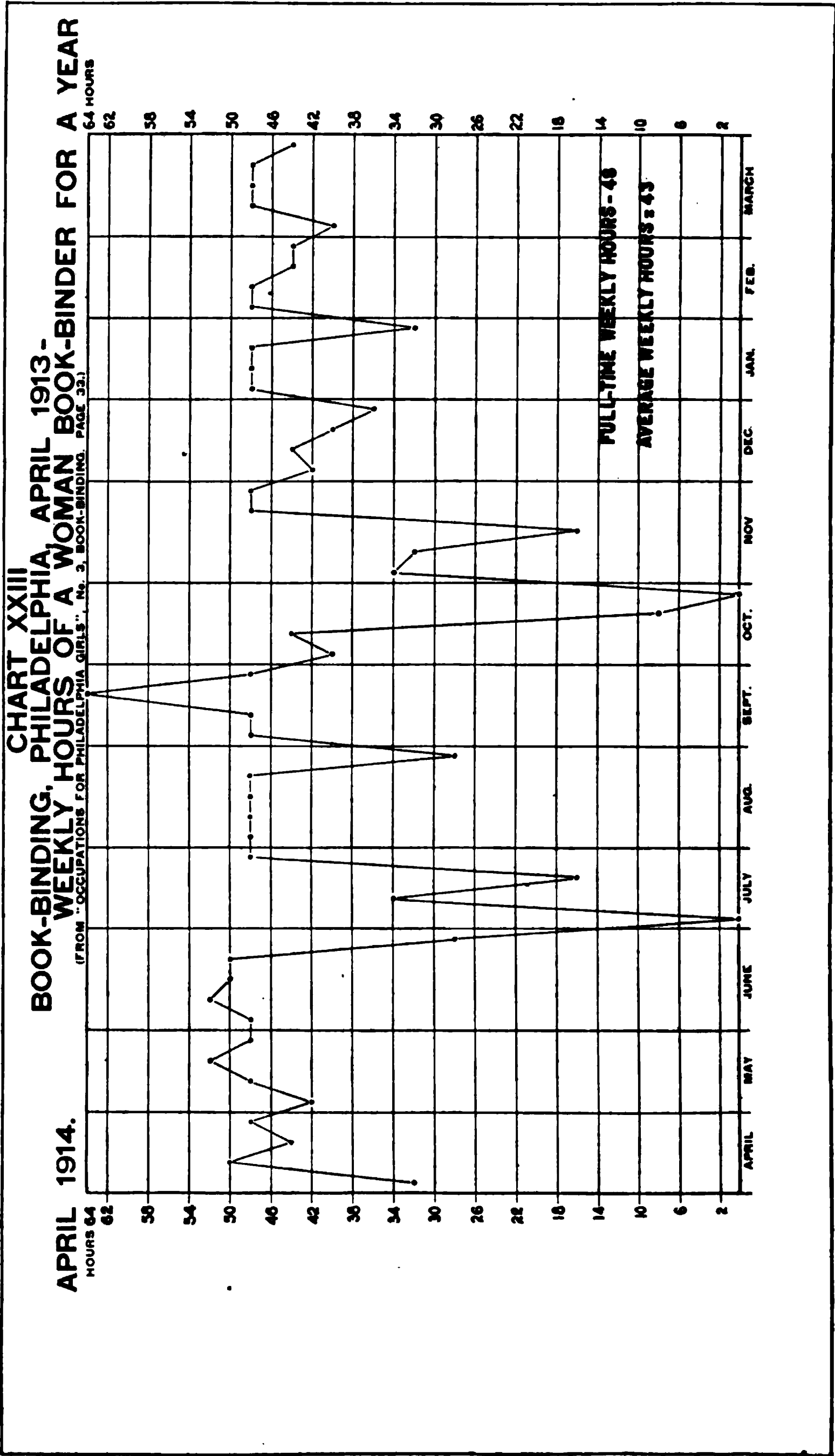
time, but could not tell how much. (See Table 11.) The report cites the instance of an "expert folder who helps to bind a commercial register issued quarterly" who was, during a year, at work: February 1st to March 7th; May 5th to July 15th; August 1st to Labor Day; November 15th to January 15th; idle: March 7th to May 15th; July 15th to August 1st; Labor Day to November 15th. She had work little more than half the year. "It would have been better," she said, "to have had \$6 a week steadily instead of earning \$8 so irregularly."

TABLE 11
WOMEN BOOKBINDERS IN NEW YORK CITY, 1910-11
NUMBERS AND PERCENTAGES LOSING DIFFERENT AMOUNTS OF TIME IN A YEAR
(From Women in the Bookbinding Trade, by Mary Van Kleeck, p. 118)

AMOUNT OF TIME LOST	Number losing	Per cent. losing
No time.....	40	27.0
Less than 1 month.....	27	18.1
1-3 months.....	22	14.9
3-6 months.....	14	9.5
6 months or more.....	8	5.4
Time of uncertain length...	37	25.0
Total.....	148	100.0

The prevalence of slack work is further shown by some figures from Philadelphia. It was found that 87 women out of 147 had changed from establishment to establishment, making 200 changes in all, and that 52 of these, very nearly a quarter, were due to dull or unsteady work.

In Philadelphia 129 employees were asked how many months of the year they were not employed full time. More than half of them, it turned out, were on short time from one to eight months during the year. Twenty-five worked short time from six to eight months, 30 between three and six months, and 13, one or two months. The largest number were on short time, six months and four months, a half and a third of a year. This prevalence of short time causes us to turn to the hours worked. Where did this loss occur? Again from the Philadelphia investigation, we have the average weekly working hours for 90 girls during a year. Full time for these girls was 48 hours a week, but only one girl reached this point, whereas two averaged only forty hours. Only 27 girls averaged from 45 to 48 weeks during



the year, but 63 had average weekly hours between 40 and 44. Forty-three hours was the average reached by the greatest number. Full pay is obtained only for full-time work, so all these girls but one would fall below their nominal rate of wages for the year, 10 per cent. being the most frequent loss.

These losses from full time conceal wide fluctuations in the hours of individual workers week by week as Chart XXIII illustrates. This chart gives the actual hours worked each week during the year by a Philadelphia girl who is said to be a "typical worker." Aside from the two weeks when she had no work at all, this girl's weekly hours varied all the way from 8 to 64 and without doubt her wages went up and down correspondingly, being eight times as much in the longest as in the shortest week. Her average weekly hours for the whole year were 43, making her annual loss from the full time, 48 hour week, and consequently from the full time wage rate, about 10 per cent.

VARIATION IN EARNINGS.

Bookbinding is another industry, then, in which wage-rates and earnings are not likely to be identical. To study this relation between earnings and wage-rates, the weekly rates and actual average weekly earnings of 158 women who were personally interviewed, were taken from the pay-roll by the Philadelphia investigators. In every wage group above \$5, with the exception of the four women at \$11 and over, fewer women were found to receive given amounts than were rated at those sums. For instance, only eight women were rated at less than \$5 a week, but 35 actually received these amounts; 31 were supposed to be paid between \$7 and \$8, but only 24 actually received such a sum; 43 had a rate of between \$8 and \$9, whereas only 21 were really found in this wage group.

TABLE 12
WOMAN BOOKBINDERS, PHILADELPHIA, 1912-13
NUMBER AT GIVEN RATES AND NUMBER WITH ACTUAL AVERAGE WEEKLY EARNINGS
(From "Occupations for Philadelphia Girls, No. 3, Bookbinding," pp. 43-46.)

	\$2- \$2 99	\$3- \$3 99	\$4- \$4 99	\$5- \$5 99	\$6- \$6 99	\$7- \$7 99	\$8- \$8 99	\$9- \$9 99	\$10- \$10 99	\$11- and over	Total
Number at rate.....	...	2	6	20	23	31	43	17	12	4	158
Number with actual average weekly earnings...	2	21	12	21	22	24	21	15	7	4	*149

*Actual average weekly earnings not given for nine women.

Miss Van Kleeck's investigation in New York City shows a similar irregularity in earnings, week by week, and a similar loss from possible full time earnings, for workers supposed to be paid a flat rate. Two examples of wages each week for a month are cited as "typical." The first is a magazine binder. The first and second week of the month she received \$12, the third week there was no work at all, the fourth her pay was between \$8 and \$9. Her average weekly wage for the month was \$8, only two-thirds of her maximum wage. A "learner" received \$4, \$5, \$5.92 and \$4.65 for the four weeks, making an average of \$4.92 for the month, about five-sixths of her highest wage. Miss Van Kleeck sums up the losses of women book-binders in New York City by comparing their full-time and actual annual earnings for the year studied. Their average weekly earnings were \$7.22. On this basis, annual earnings would be about \$375. But in reality they were only \$325. Thus there was an average loss of \$50 yearly, almost a dollar a week or 14 per cent. of the weekly wage, caused by the alternation of long hours of work with slack time.

SUMMARY

Work in binderies is more likely to be good in the spring and before Christmas and slack in the summer. In consequence, there is a reduction of the working force of from 12 per cent. in Massachusetts and Philadelphia, to 23 per cent. in New York City during the dull season. But in addition to these necessarily casual workers, all the women feel the effects of the variation of the work with orders, the result of this irregularity being an annual loss in hours and earnings. From all the evidence it would appear that on account of these irregular hours within short periods, unless the trade becomes more regular, any weekly wage-rate, which attempts to provide the worker with a living income, must be increased by a tenth (10 per cent.) to a seventh (14 per cent.), to make up for the loss in time and earnings suffered by the steady employees on account of this irregularity.

SALESGIRLS

GENERAL STATISTICS

According to the volume on "Occupations" of the United States Census of 1910, 250,000 saleswomen were found employed in retail establishments. In addition, of the 111,000 "clerks in stores," the larger proportion "were not engaged in clerical work but were also salespeople" says the census. Here is an industrial army of uncertain numbers, but approaching 300,000 women at the lowest estimate. Because we deal with them directly, few classes of workers are more in the public consciousness. The salesgirl's low wages with her necessarily higher expenses in maintaining a good personal appearance, have been the subject of much popular concern. On this account it is particularly important to find out whether the average salesgirl is so steadily employed that a minimum wage rate, based on cost of living alone, would really provide her with an adequate "living" income.

SEASONAL VARIATIONS

It is frequently thought that the earnings of salesgirls are not affected by irregular employment, since the girls are paid by the week or sometimes by commissions on sales. Seldom if ever is a retail store or any part of it closed because trade is slack. Therefore, in contrast to manufacturing industries, it is true that the women who are so lucky as to keep their places all the year round suffer very slightly from seasonal irregularity. But all the facts at hand show that a very large percentage can find work only before Christmas and in the spring and are turned off after Christmas and in the summer. For these girls, retail trade is a highly seasonal employment.

STATISTICS OF IRREGULAR EMPLOYMENT

Taking up first the so-called "steady" workers, a District of Columbia inquiry made by the federal Bureau of Labor in 1912

showed considerable steadiness of employment. Over 200 women who had been wage earners for a year or more were questioned on the subject and 88 per cent. worked more than 40 weeks during the preceeding year. The average period of employment during the year for all of these women was very nearly 48 weeks. In Massachusetts, the Commission on Minimum Wage Boards in 1911 also came to the conclusion that the work is very regular except for some "forced vacations." A few women were compelled to take such "forced vacations" without pay in the summer or after Christmas. Only 5 per cent. of the steady workers staying throughout the year in a single store lost time from industrial reasons and these few lost an average of fifteen working days during the year. The Commission also found in still another group of workers whose average length of employment in one position was 42 weeks out of the year, that only 6 per cent. lost time from this cause, though these few lost a large amount of time in this way — 18 per cent. of their total period of employment or 46 working days.

We do not, therefore, find evidence that the steady worker in retail stores is subject to any great loss of time or money on account of lack of work. But we still have to consider whether all employees can find steady employment throughout the year in retail stores. The facts about the varying numbers employed at different seasons are undoubtedly masked by the constantly changing personnel of the working force of any large store. Yet considerable light is thrown on this point by the "number employed by months" which the New York State Factory Investigating Commission obtained for the eighteen largest department stores in New York City, and for department and five-cent and ten-cent stores in the rest of the state for the year 1913. In New York City stores, the largest, smallest, and average number employed is given for each establishment, the figures being given the Commission by the firms themselves. The table following shows that nearly 40 per cent. of the total number of employees were out of work at the slack time of the year. While in one store (No. 7) the difference was only 15 per cent., in another (No. 11) it was almost 50 per cent. In every instance the greatest number of employees was at work during the Christmas rush and the smallest number in the summer.

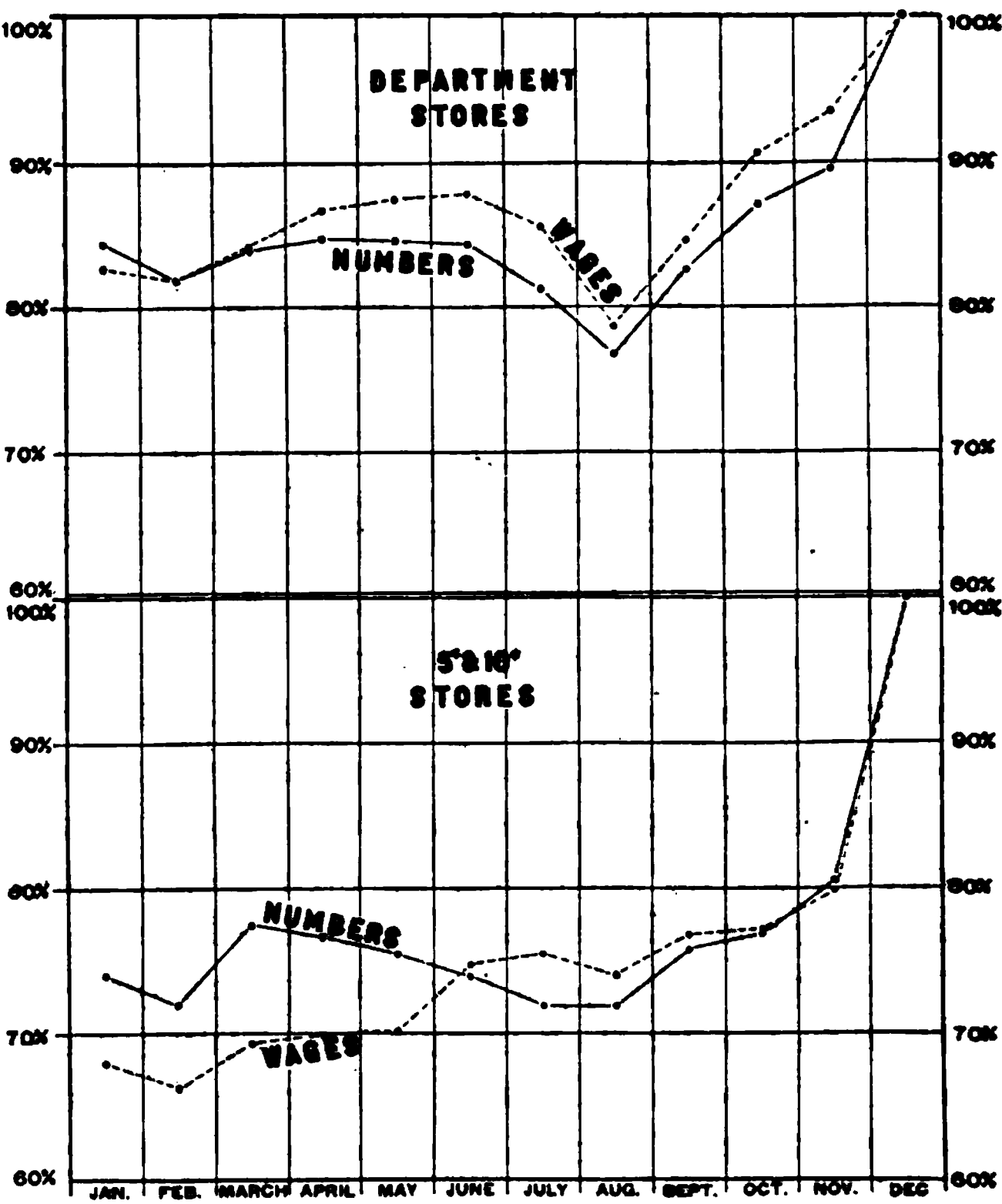
RELATION OF EMPLOYMENT TO WAGE FOR WOMEN 607

TABLE 13
RETAIL STORES, NEW YORK CITY, 1913
NUMBER OF EMPLOYEES IN THE 18 LARGEST ESTABLISHMENTS

FIRM	Greatest number employed	Least number employed	Average number employed	Per cent. least number is of greatest	Dropped or left during year	Added during year
Number 1.....	5,724	3,999	4,296	69.8	5,950	5,979
2.....	3,672	3,075	3,497	83.7	540	875
3.....	884	416	533	47.0	538	611
4.....	1,863	1,252	1,460	67.2	2,657	2,605
5.....	5,187	2,888	3,500	55.6	8,750	8,155
6.....	5,743	3,283	3,750	57.0	10,382	12,159
7.....	2,205	1,879	1,979	85.2	1,795	1,839
8.....	928	459	664	49.4	.....	.....
9.....	3,125	1,669	2,359	50.2	.....	.....
10.....	2,095	1,518	1,896	72.4	.....	.....
11.....	2,369	1,190	1,760	50.2	.....	.....
12.....	5,340	3,483	4,272	65.2	6,712	6,809
13.....	1,250	735	800	58.8	746	1,025
14.....	1,497	1,020	1,085	68.9	477	477
15.....	2,100	1,570	1,800	74.7	.....	.....
16.....	1,318	642	864	48.7	1,250	1,286
17.....	2,887	1,644	2,313	56.9	2,539	2,967
18.....	7,400	4,600	5,000	62.1	.....	5,500
Total.....	55,587	35,322	41,828	63.5	.....	.....

Like conditions existed in the up-state stores. (See Chart XXIV.) In the department stores, only 81 per cent. of the maximum number were at work in February, 81 per cent. in July and 76 per cent. in August. If we take the numbers week by week, instead of the monthly averages which smooth down the extreme variations, there was an even greater drop, to 70 per cent. during the third week in August. The fluctuation in the total amount of wages paid out monthly was very similar or a little less than the variation in numbers — quite in contrast to the situation in factories, where wages drop below “number employed” on account of the losses incurred by steady workers through short time. There is practically no such short time in stores, and the lower paid and less experienced girls are more likely to be discharged during the slack periods, causing the wage level for those who are left to rise higher at this time. The five-cent and ten-cent stores up-state showed in general the same state of affairs in regard to regularity of work and wages. Average numbers employed fell off somewhat more, to 71 per cent. of the maximum in July and August, by monthly averages, and to

CHART XXIV
NEW YORK, UPSTATE RETAIL STORES, 1913
AVERAGE NUMBER OF SALESGIRLS AND TOTAL
AMOUNT OF THEIR WAGES BY MONTHS.
(MAXIMUM = 100%)



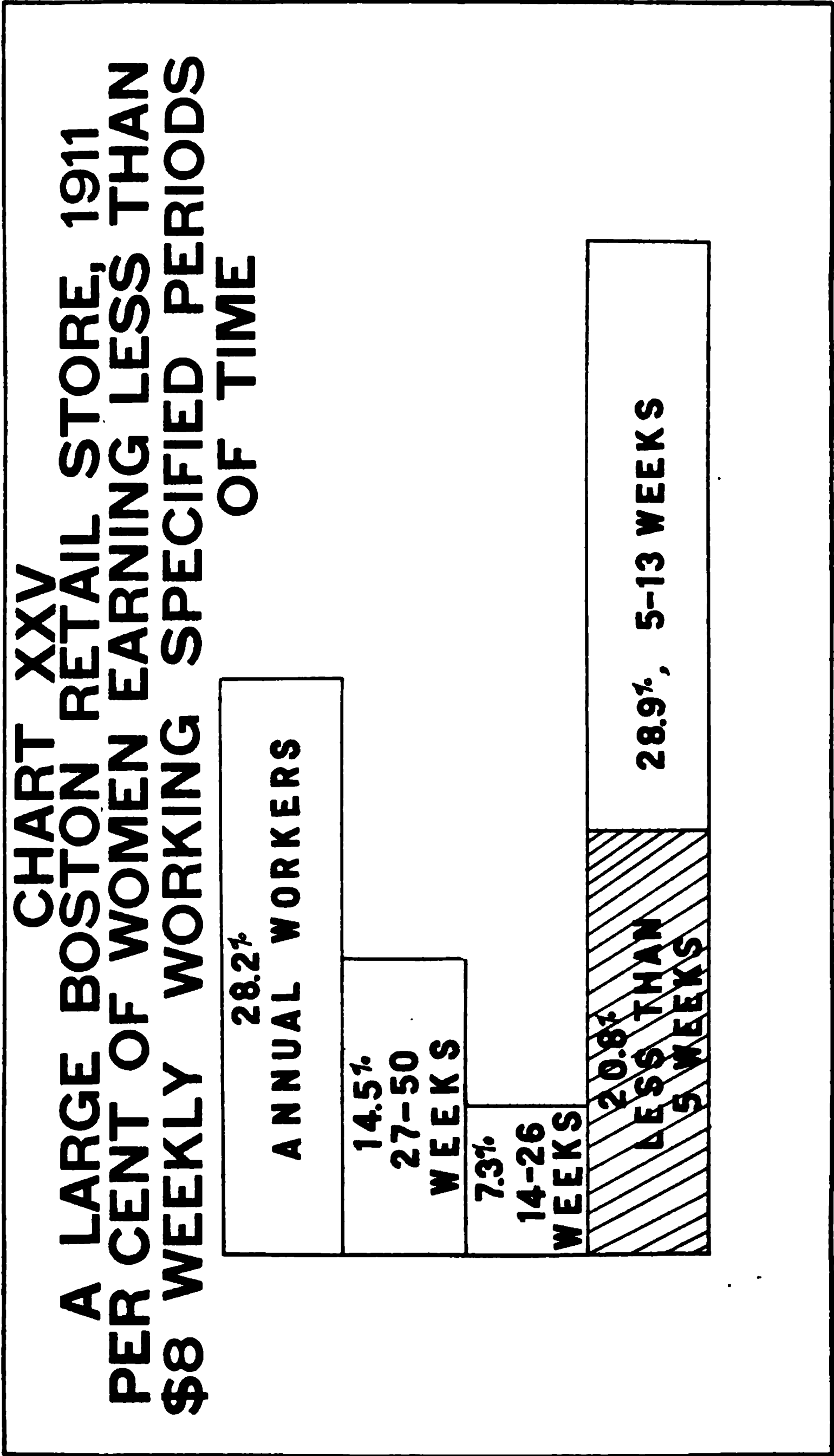
60 per cent. in one week in February when the number employed week by week was considered separately. Wages followed a like course, though the percentage of variation dropped somewhat below that for numbers employed during the first months of the year.

Evidence as to similar irregularity comes from widely scattered points—Baltimore, Kansas City and Portland, Oregon. In Baltimore, Miss Butler's investigation of 1909 showed that the larger retail stores employed only two-thirds as many women during the dull season as in busy times. In Kansas City over a tenth of the saleswomen questioned by the Board of Public Welfare in 1912-13 had lost time from unemployment during the previous year. In Portland, the report of the Social Survey Committee in 1912 found that only those girls who had been two years or more in the same place could be reasonably sure of keeping their positions after the Christmas rush was over, and even then some girls who had been in the same store for several years were laid off.

SHIFTING

Necessarily, then, on account of the varying number of sales-girls required at different seasons, some women can remain in their places for only short periods. But an intensive analysis of the labor force made in a single large department store in Boston reveals more clearly the actual situation in regard to the very small proportion of steady workers. (See Chart XXV.) In this investigation of all the women earning \$8 a week or less, who were 91.7 per cent. of the whole number, all specials, emergency and Christmas help were excluded, yet just about one-half the women remained in the establishment less than three months. Only about a quarter remained the whole year.

The amount of shifting in New York City stores mounts up to almost incredible numbers. (See Table 13.) In all the twelve stores together for which the number added and left during the year could be ascertained, the number of changes was greater than the largest number employed at any one time. Firm No. 6 had only 5,700 employees at the maximum and 3,200 at the minimum, yet 10,000 employees left during the year, voluntarily and



involuntarily, and 12,000 were taken on,—more than twice as many as the largest number employed. In four of the other stores, for which these facts could be ascertained, Nos. 4, 5, 12 and 17, the number shifting through the establishment during the year was larger than the greatest number at work at any one time. In each of the stores, there was a difference of from 35 per cent. to 45 per cent. between the smallest and largest number employed at any one time. With Firm No. 2, where there was only a 17 per cent. difference in numbers, it is noticeable that the flux of workers was also lowest in proportion to the total numbers employed; 3,600 were employed in the busiest season, 3,000 in the dullest, and only 540 left and 875 new employees were hired during the year. Up-state, a large department store employed 1,777 persons during the year. Of this number 5.9 per cent. remained less than a single week. About a quarter, 25.9 per cent. stayed from one to four weeks, and over half, or 50.2 per cent. less than three months. Only 12.2 per cent., less than an eighth, held their places eleven months or more out of the year.

On the other side of the continent, in the state of Washington, a survey made by the Industrial Welfare Commission showed that a quarter of the 1,268 women employees in mercantile establishments who were questioned, had been in their present positions three months or less.

While it is difficult to get reliable evidence as to the cause of this great flux of workers and how far it is due to conditions over which they have no control, yet the results of a few inquiries may be noted here. The 1911 Massachusetts Commission on Minimum Wage Boards, in investigating the trade histories of 2,726 salesgirls, found that 26 per cent., or over a quarter of the shifts among the 1,885 women who had changed from one place to another were on account of "slack work or none." A larger proportion of saleswomen in this industry made changes for this reason than workers in the admittedly irregular confectionary industry. Another investigation concerning the incomes and expenses of 500 Boston working women was made by Miss Louise Bosworth in 1907-9. The saleswomen considered had nominally an average yearly income of \$382.92. But their loss from slack work and unemployment—almost en-

tirely from the latter — caused them a loss of 8 per cent., bringing their average yearly income down to \$356.

Lastly we must keep in mind the facts previously given as to the varying numbers employed at different parts of the year. Almost a quarter of the saleswomen in New York State, outside the city and over a third in New York City alone, could not possibly keep one place all the year round, however much they wished to. It is not denied that personal reasons are an important factor in causing a large proportion of the changes, but the industry itself cannot evade entire responsibility for this demoralizing drift, so fatal to steadiness and efficiency. Retail trade must stand convicted, then, as one more occupation which has a share in creating a casual labor force, with all the attendant evils to the human beings that compose it.

SPECIAL PROBLEMS

A special problem in connection with most retail stores is presented by the development of a separate department for making up clothing for customers or altering ready-made garments. These "alteration hands" sell no goods and their work is practically dress-making. It is not surprising therefore, that they should suffer from irregularity of employment as dressmakers do. They are very busy three months in the spring and three months in the fall. For the time between there is almost nothing to do, and the great majority of these women are discharged or forced to take unpaid vacations or hunt for other work for several months. Such was the state of affairs found in Massachusetts and Connecticut, by state investigating commissions in 1911 and 1913 and in Baltimore through an investigation made by Miss Butler in 1909, where one-third of the stores discharged all such workers at the beginning of the dull season.

Another special problem connected with irregularity of employment in retail stores is that of the "special" who works during the rush hours of the day, or in the evening, or on the heavy days of the week. How large a proportion of the whole selling force they form is uncertain, but their use is undoubtedly increasing. Estimates have been made of 8 per cent. in Boston, 4 per cent. in Baltimore, and 6 per cent. in Kansas City. Naturally since these women work only a part of the time they are paid

only part time wages. Theoretically, students, married women, or others whose chief duties are elsewhere, get a chance in this way to earn a little extra money, but there seems to be a good deal of danger that needy workers who cannot get anything else will depend on these positions for their entire income. Nor is it clear how this can be avoided.

A third important point to be remembered in connection with retail stores is that there is even less chance in stores than in other lines that "overtime will make up for undertime" — or unemployment in this instance. "There is more after hour work in stores than the public is aware of" says the Massachusetts Commission on Minimum Wage Boards. There are the long hours before Christmas, for instance, and moreover, practically all the caring for stock must be done after selling hours. Such overtime is almost never paid for. Some stores give "super money" — 35 cents is a typical amount — when girls are kept after seven o'clock in the evening. Sometimes a bonus is paid on sales during December when the hours are longest, but that is all. So the girl in the store who works through the Christmas rush and is then discharged, seldom has the slight chance of her sister in the factory to make a little extra to help her through the dull season. The great decrease in numbers also, found everywhere in mid-winter and during the summer, gives a girl discharged by one store very slight opportunity to find work in another or in some different occupation, since these are the slack times for almost all "women employing" trades.

SUMMARY.

We must, then, add retail stores to the long list of industries where the workers suffer from seasonal variations in employment. It is not those few women who succeed in keeping their places all year who suffer materially from unemployment or short time work with reduced wages, but once more we find present in large numbers the casual worker for whom the industry does not provide a place all the year round. How many of such workers there are is uncertain. According to the New York City figures they mount up to two-fifths of the whole number employed. Certainly there are enough of them to form a serious problem in establishing a real living wage.

LAUNDRIES

GENERAL STATISTICS

Like so many other one-time household activities, much of the washing of clothes has gone outside the home into large establishments with the factory characteristics of machinery and extensive division of labor. According to the latest census of manufactures in 1909, laundries gave employment to an average number of 77,330 women wage earners over 16 in the United States — 70.6 per cent. of the whole number of wage earners engaged in this trade. Since this is the first time figures for this industry were collected, no comparisons with previous census periods can be made, but undoubtedly the industry is a growing one. Steam laundries are well scattered throughout the country, furnishing employment to the largest numbers, naturally, in the states having large percentages of urban population.

SEASONAL VARIATIONS

The question whether any great amount of involuntary irregularity of employment exists in laundries and whether earnings are greatly reduced by industrial causes cannot, it must be acknowledged, be answered with any degree of certainty from any reliable information at present available.

A steam laundry is kept open throughout the entire year and there is but slight variation in the numbers employed by months through the year. In the whole United States there was about a 10 per cent. increase in the number of laundry workers during the months of July, August and September, 1909, when more wash-clothing is in use, while the smallest numbers are employed in January and February. In the larger establishments in urban centers where much linen is washed for hotels, steamships and Pullman cars, the work is very steady from season to season.

In such laundries hours vary from day to day according to the receipts of work to be done; an unusual number of visitors in

town, a convention, the arrival of several steamships will cause the working of overtime, while in any kind of steam laundry hours are likely to be irregular from day to day over a weekly period. The average laundry employee begins late on Monday morning, because the work cannot be collected and sorted before that time. She is likely to work till late Friday evening and not at all or only a few hours on Saturday since the custom is to get each week's work out of the way by Saturday night. For the same reason overtime is almost always worked the evening before a holiday. The weekly total of hours is not likely to be high but there are one or two long days every week.

STATISTICS OF IRREGULAR EMPLOYMENT.

Steady workers in laundries undoubtedly suffer very little from the lack of employment. The Massachusetts Commission of 1911 questioned on this point 593 workers remaining the whole year with the same firm and 1,049 "part of the year workers" who stayed in the same place an average period of 36 weeks. Of the former only 1.5 per cent. lost time from "enforced idleness," being out but 4 days each, on the average, from this cause. Only 1.8 per cent. of the latter lost time in this way, though these few lost a considerable amount, an average of 30.6 days each or 14.1 per cent. of their whole period of employment. It is the same state of affairs as was found among the "steady" group of salesgirls. The same investigation compares the average weekly earnings of 539 "annual workers" for the weeks they had work with 1/52 of their annual earnings. The difference between the two is very small, only 18 cents a week, amounting to 2½ per cent. of their annual earnings. Absence for personal reasons might readily account for all of this. In candy factories for instance the weekly loss computed on the same basis, was 10 per cent.

SHIFTING.

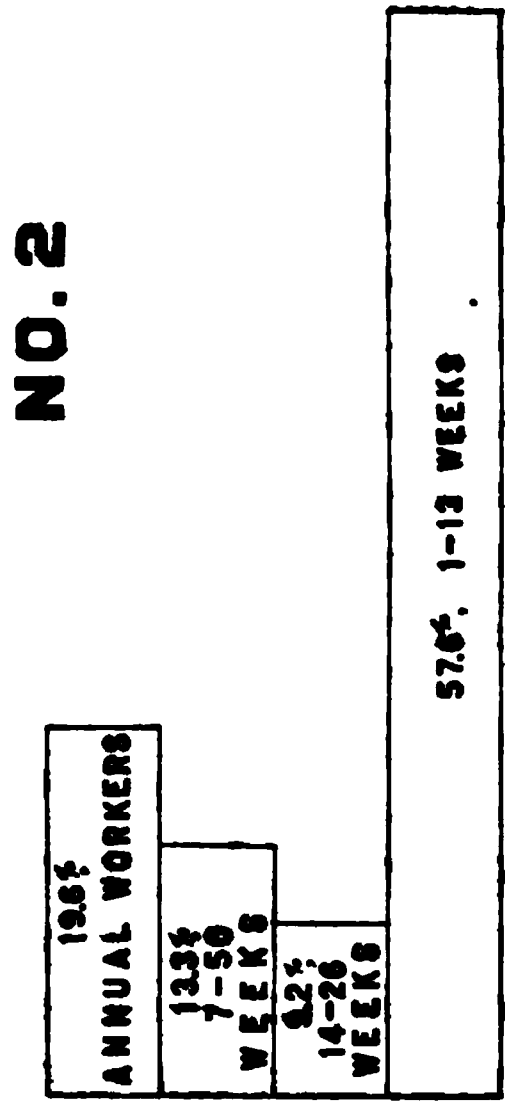
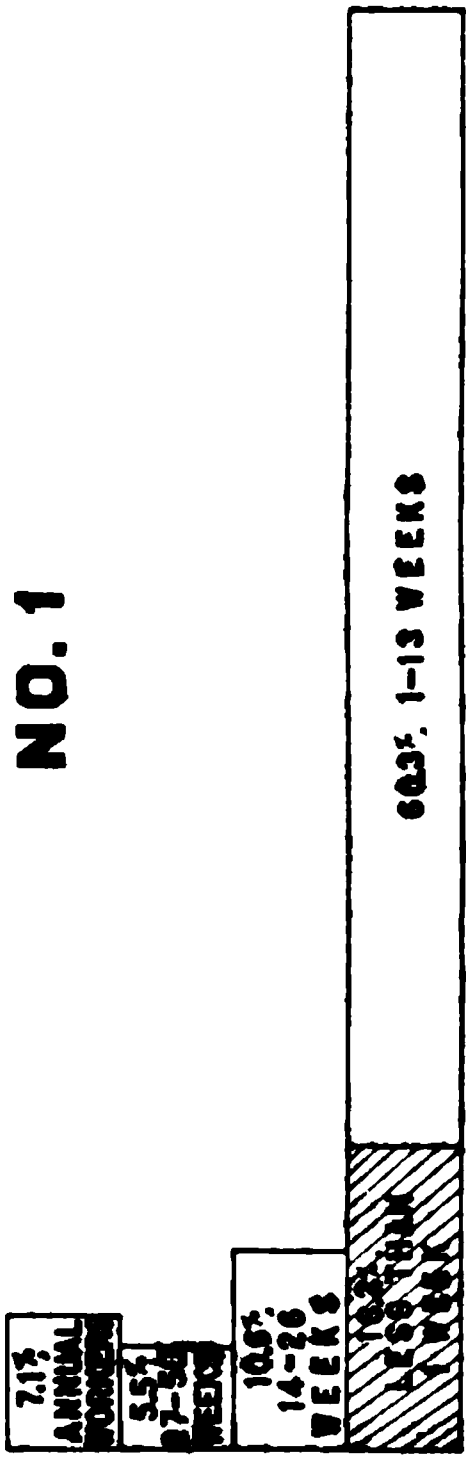
But it is a very small portion of the women in laundries who are such steady workers. For the most part the labor force is of a particularly shifting character.

The testimony of employers before the Washington Minimum Wage Commission in 1913 makes this very clear. The proprietor

of a laundry in Tacoma said "60 to 90 days eliminates a crew completely. Some of the girls work but a few days." Another from Spokane admitted that "75 per cent. of the women coming to his plant did not stick." A third said that he developed one competent laundress out of every ten who start in. On the other side of the continent, in Massachusetts, the same conditions prevail. In 1911 the Commission on Minimum Wage Boards found that in one laundry, 57 per cent. of the workers remained less than three months. In another 76 per cent. had left by the end of that time (see Chart XXVI). Only 19 per cent. in the former and 7 per cent. in the latter were permanent "annual" workers. In 1914 the Massachusetts Minimum Wage Commission again studied the length of time that nearly 3,000 women workers had stayed in the same establishment. Not quite one-half remained four months or less. There were however great differences between the 36 laundries studied. In two laundries, 80 per cent. of the women kept their places the whole year while in four others only 2 per cent. did so. Between the various occupations the differences are likewise marked. Workers are least permanent in the least skilled, lowest paid lines of work. For instance, a woman is likely to become "shaker" when she first enters a laundry. All day long she shakes out the wet linen which has been packed into solid masses by the whirl of the washing machines. Only 3 per cent. of these workers remained the whole year, whereas 22 per cent. of the hand washers did so, and 23 per cent. of the "bosom pressers," who iron the bosoms of men's stiff shirts, an operation requiring much skill. Now the question is, what is the cause of this flux of workers? Is it the nature of the work, exhausting yet little skilled, carried on mostly in the midst of heat and steam and for low wages? Or is some portion of the shifting due to slack work and therefore involuntary on the part of the workers? It is difficult to answer these questions with the information thus far available about the industry. The Massachusetts Minimum Wage Commission, which has made the most recent and most searching investigation of the laundry industry, says that "the material which could be obtained * * * was not a matter of record and appeared highly unreliable."

Evidence as to the partial responsibility of the industry for

CHART XXVI
TWO BOSTON LAUNDRIES, 1911
PER CENT OF WOMEN WORKING FOR
SPECIFIED PERIODS OF TIME DURING THE YEAR



this flux of workers was found by the Massachusetts Commission on Minimum Wage Boards in 1911 when it questioned 1,045 women laundry workers, as to their reasons for changing positions. Twenty-one per cent. had always been in the same place, but 21 per cent. of the changes made by those who had shifted were on account of "slack work or none." This percentage is just about as large as the proportion changing for the same reason in the admittedly irregular confectionery industry. On the other hand, in Milwaukee, in the years 1911-12, a federal investigation of women workers in power laundries disclosed the fact that "the fluctuations of trade do not cause an average loss of more than one month in twelve."¹ This is not great as industries go.

The strongest proof of the personal causes behind the shifting, however, is found in this same 1914 report of the Massachusetts Minimum Wage Commission on wages of women in laundries. They found the percentage of the total number of employees studied who were out of work each week during the year. This percentage varied very little throughout the whole period, and showed therefore nearly the same number entering and leaving positions each week. Hence the Commission, believes that "industrial causes proper play but a small part in the fluctuation of employment" and, weighing all the evidence, this seems to be the only conclusion to draw as to the situation.

VARIATION IN EARNINGS

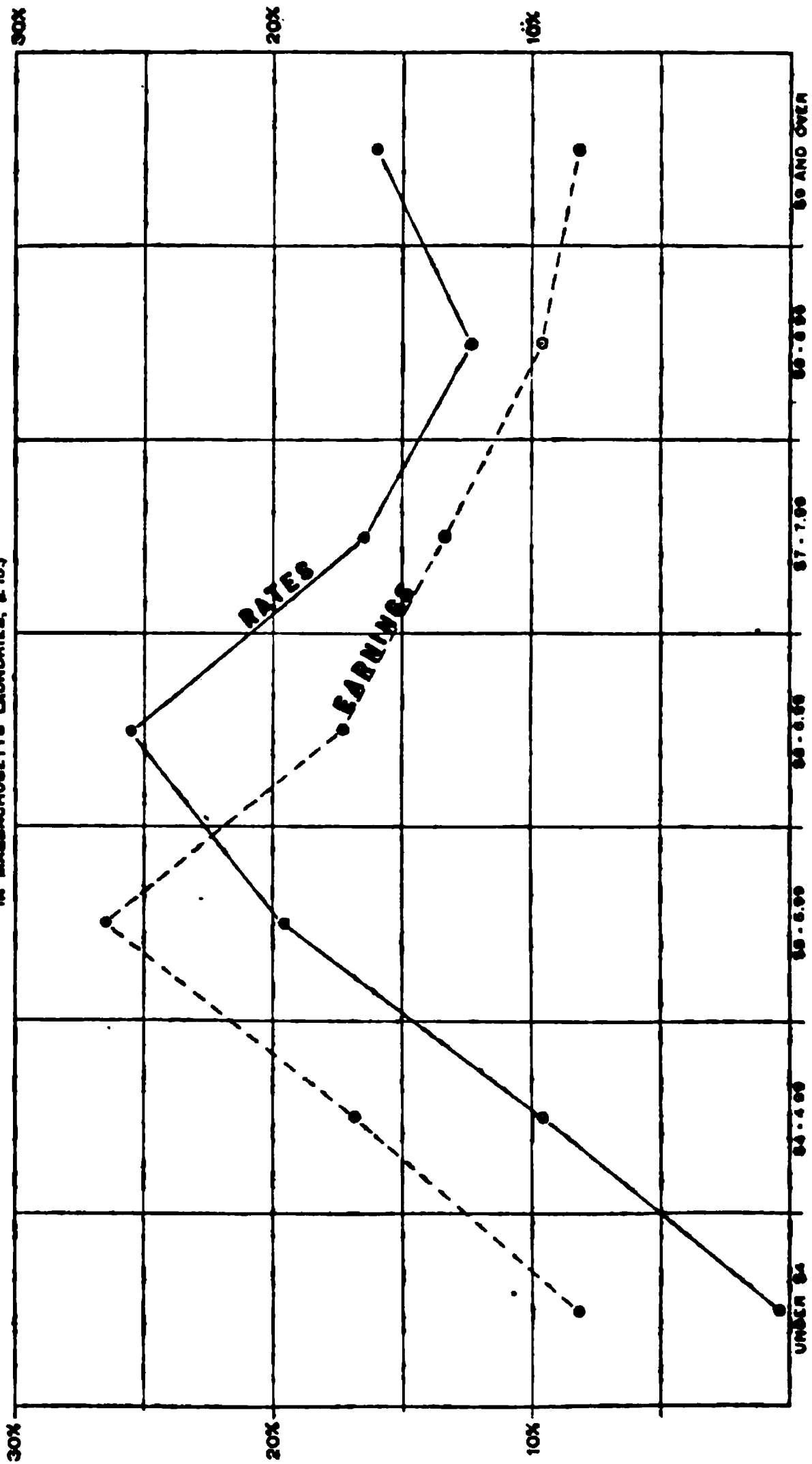
There appears to be, therefore, little forced unemployment among laundry workers, only slight variation in the numbers employed at different seasons, and but little closing for entire days. Moreover, most laundry workers are paid a flat rate often with overtime pay for the extra hours of the long day. It might then be thought that weekly earnings would equal weekly rates of pay, or even rise above them. But this is seldom the case. The 1914 investigation of the Massachusetts Minimum Wage Commission showed that as in so many other industries, weekly rates rose above weekly earnings. Twenty-nine and six tenths per cent.

¹ Department of Labor, Bureau of Labor Statistics, Bulletin No. 122, p. 79.

of the 3,000 women employees covered by the investigation were scheduled at less than \$6 a week. In reality over half, 51.5 per cent. received less than that sum. In addition only half as many really received the larger weekly earnings as were rated at these sums; 16 per cent. had weekly rates of \$9 and over, but only 8.2 per cent. actually averaged this amount. (See Chart XXVII.) Short time and not entire days' or weeks' absence is the cause of most of this discrepancy between rates and earnings according to a table correlating average weekly hours and earnings in this same investigation. There is, therefore, a considerable amount of short-time and this holds true not only in Massachusetts but in other localities as well. In Washington, 19.4 per cent. of the laundry workers studied by the Industrial Welfare Commission worked 40 hours or less weekly, and 19.3 per cent. worked less than 5 days a week. In Massachusetts in the seven laundries where records of weekly hours were kept, 9.1 per cent. of the women worked less than 40 hours a week and 14.4 per cent. more worked less than 46 hours.

Short time exists, then, in laundries just as in so many other industries and time wages fall off as do the hours worked. Women in laundries, like so many other workers are paid almost "by the minute." The earlier Massachusetts investigation, in 1911, noted a "tendency to pay the worker only for the hours during which she was employed," thus "paring down the labor cost at the expense of labor." This meant only small losses day by day, a half hour here and an hour there. But such small intervals cannot be made up with other work and the loss runs up to a considerable sum in the course of a year. On the other hand many employers insist that most of the short time is due to the personal preference of the employees. The later 1914 Massachusetts investigation finds this difference of opinion and is obliged to leave the point open. "What amount of this loss" (in earnings compared with rates) "is due to compulsory short time and what to the preference of the employee is a matter about which the Commission was not furnished material with which to form an impartial judgment." But one thing is certain, rates and earnings are far from identical. A minimum wage rate would not mean an adequate income to many laundry workers.

CHART XXVII
SELECTED MASSACHUSETTS LAUNDRIES, 1913.
PER CENT OF WOMEN WORKERS AT SPECIFIED AMOUNTS
(WEEKLY AVERAGE FOR THE YEAR.)
(FROM REPORT OF THE MASSACHUSETTS MINIMUM WAGE COMMISSION ON WAGES OF WOMEN
IN MASSACHUSETTS LAUNDRIES, p. 15.)



SUMMARY.

Except in the larger and more modern establishments, much of the work in laundries is extremely disagreeable, carried on in rooms filled with heat, steam and moisture, and under conditions involving considerable physical exertion for extended periods of time — all of which is apt to cause the more inexperienced worker great fatigue or even illness. Wages, except for the older, steady workers are low. It can scarcely be a matter of surprise therefore that the amount of shifting in laundries is very great, although fairly steady employment seems to be offered. This situation presents a peculiar problem for minimum wage boards. If it is the intention really to provide a living wage, should not a higher rate be allowed for this industry where the physical exposure of the worker is so much greater? Any employer who objects to this higher rate has, of course, the option of bettering the conditions of work by removing the causes of excessive physical strain and unhealthful conditions. In this way he will take away the objections of many employees to his work and will secure for himself a more steady and reliable set of workers.

CANNING AND PRESERVING

The canning of fruits, vegetables, and fish is a prosperous and growing industry in the United States. Few industries exhibit a greater seasonal variation in the numbers employed month by month during the year. According to the latest United States Census of Manufactures taken in 1909, the maximum number of wage earners, 154,800, was employed on September 15th. The minimum number, 19,998, employed on January 15th was only 12.9 per cent. of the maximum number. Moreover, very nearly half of the whole number of wage earners were women sixteen and over. The number of women at work on a "representative day" in 1909 was 77,593, 49.8 per cent. of the whole number of wage earners. The industry is, therefore, one characterized by extreme seasonal variation and providing employment for large numbers of women workers for short periods of time.

Two types of canneries must be distinguished. One is generally found in large cities. It uses not only a variety of fresh fruits and vegetables drawn from a considerable territory, but also it may prepare baked beans, pickles, various ketchups and sauces, plum puddings, and so on. In that case such an establishment may run the whole year round, though its work will be much heavier in the late summer and early fall than at other seasons. Under these conditions, the problem of irregularity is chiefly one of reducing excessive hours of overtime for the women workers during the busy season through the legal regulation of their hours of labor.

The other type of cannery is generally found in small towns or in the open country, and puts up one or a few kinds of fruit and vegetables raised nearby. It is open only a few weeks in the late summer or early fall, the period lengthening out if several different kinds of products are used. The working force may be whole families, largely foreigners, who have come out from the cities for the season; or it may be the people of the neighborhood, including many married women, school girls and children who

are not regular wage earners, or it may be any mixture of these two classes. Thus apart from the usual currents of industrial life many serious abuses may flourish, such as the work of young children, bad sanitary conditions and over-crowding and incredibly long hours with frequent night-work. It is to child labor laws, the sanitary regulation of labor camps, and laws regulating women's hours of labor that we must look for the correction of these evils.

The adjustment of a minimum wage rate in such canning factories should require, therefore, not so much an allowance for the reduction in earnings from short time and unemployment, but a consideration of a fair wage level for an industry that runs only a part of the year, during which time a certain number of hours' work may reasonably be expected. In Australia, similar work is thought of as an "expedition" and the wage is calculated on the basis of a fair return for unskilled labor for the trip as a whole, making allowance for "the short periods of employment, the expenditure of money and of time in getting to the work, the broken time of the employees, the fact that they are paid by the hours of actual work."¹ These conditions are identical with the conditions of employment in this second type of cannery in the United States, where the problem has not been taken up. Yet in New York where these "country canneries" are of great importance, it would be an important and difficult question for any Minimum Wage Board.

¹ Reports of the Commonwealth Arbitration Court of Australia, Vol. 6, p. 61.

MISCELLANEOUS

The industries already described by no means exhaust the list of those in which women workers suffer from irregular employment. So little attention has been paid to the special problem of irregular and casual labor for women in the United States that it is impossible to get hold of its entire extent. Scattering bits of evidence, however, indicate that the following industries give rise to considerable irregularity of work with the resulting loss of earnings. The list is admittedly incomplete, but may serve to emphasize further the seriousness of the problem. Separately each one is not of relatively great importance as an employer of women, but altogether in the ones for which separate figures can be obtained, over 20,000 adult women wage earners are found. This number does not include "dyeing and cleaning," "tin cans" and "leaf tobacco" treated below, since the number of wage earners is not given separately in the census for those occupational groups.

AWNINGS

The busy season in this industry is at most April, May, June and July. "With the first warm days, all the customers order at once."¹ In Pittsburgh in 1907 it was found that during the rest of the year only a quarter or half of the force was kept on hand. The same state of affairs existed in Kansas City in 1912-13, according to the Board of Public Welfare. In Massachusetts in 1912, also, work was only good for these same four months. According to the Statistics of Manufacture for that year, the largest number were employed in June, nearly as many in April, May, and July, and only 55 per cent. to 65 per cent. of the maximum during the rest of the year. Evidently a large proportion of these women must get their living through some other sort of work for eight months a year or remain unemployed. Nor do steady workers entirely escape these effects of seasonal irregularity. The Massachusetts establishments were entirely

¹ "Women and the Trades," by Elizabeth B. Butler, p. 151.

closed an average of thirty working days during 1912, therefore reducing the time and earnings of the steady workers 10 per cent. in this way alone.

BUTTONS

Probably on account of its connection with the various garment trades the manufacture of buttons fluctuates as do the garment trades in regard to the number of women employed. There is a slight rise of numbers in the spring, a very low drop during the summer, the climb to the highest point in the late fall, and a decline after Christmas. In Massachusetts only 80 per cent. of the women in 1912 could keep their places the year round. In New Jersey the manufacture of pearl buttons, which is not especially seasonal, is classified separately from that of metal buttons. In the latter in 1912 there were places for only 55 per cent. of the women employees for the entire twelve months, while curiously enough, the number of men employees, who compose about half of all wage earners, varied but little at different parts of the year. In New York City in 1913, the State Factory Investigating Commission found that in the manufacture of covered and celluloid buttons, four large establishments employed a maximum of 360 and a minimum of 178 workers or only 49.8 per cent. of the largest number. The Commission states that while the best workers have almost continuous employment, the average button-maker works only six or eight months a year.

The steady workers, too, lost considerable time during the year, since in 1912, in both Massachusetts and New Jersey, the factories even according to the inadequate figures on "average number of days in operation yearly" were entirely closed two weeks out of the year. Undoubtedly in addition to this loss they suffered from short time and an additional reduction in earnings, for these conditions have been found to go together wherever more extended investigations have been made. Such a situation is indicated by the fact that in New York City in 1913, the State Factory Investigating Commission found that half the women workers were rated at \$7.50 or more weekly, but that in the

selected week in which their wages were studied, over half received less than \$7.

In addition, the figures available show fluctuations in the industry from year to year, probably due to the greater or lesser use of buttons as dress trimmings. In 1910 in Massachusetts there was considerably more irregularity than in 1912, since in the former year the minimum number of women employees was only 60 per cent. of the largest number, instead of the 80 per cent. of the latter year, and the establishments were closed an average of 49 working days during 1910, which meant a loss of no less than eight weeks to the steady workers. In New Jersey in the same year, the average length of time entirely lost by each establishment was nearly four weeks. The number of women employees remained comparatively even during the year, but the largest number was about the same as the smallest number in 1912, indicating a stagnant condition in the industry at that time.

BRUSHES

In Massachusetts in 1913, perhaps on account of the competition of prison labor, the State Minimum Wage Commission found brush making to be a "stagnant trade" in which short time weekly was the rule. Out of 489 workers for whom data as to average weekly hours were available, 27.1 per cent. worked an average of less than 42 hours weekly, and 54.8 per cent.—over half—worked less than 46 hours weekly. Only 13 women worked 50 hours a week or more. Though some of the manufacturers claimed that this working of short time and consequent reduction of wages was voluntary on the part of the employees, since this condition existed among time workers as well as among piece workers, the Commission felt that it indicated lack of work.

The Commission found, however, that no great seasonal variations existed. Nearly the same number of the steady workers were unemployed each week in the year, except for short periods in June and August, and the Commission thought that the increased number of absences in these times might easily be accounted for by vacations. In Pittsburgh, on the contrary, in 1907,

marked seasonal irregularity in the trade was discovered.¹ No obvious reason appears why brushes are not just as much needed at one season as at another, yet in Pittsburgh there was a markedly busy season with overtime from April to August and a very slack period from August through the fall.

DYEING AND CLEANING

In Pittsburgh in dyeing and cleaning shops it was discovered² that overtime work occurred three to five nights weekly from March to May. Then during the summer when well to do people are out of town and more wash clothes are worn, there was a slack season during which the majority of the women employees were dismissed.

GLASS

The majority of the women in glass factories are employed in the decorating, finishing and packing departments of plants that manufacture fancy glassware. A federal investigation³ made in 1907-8, states that a third (31 per cent.) of all the women wage earners worked overtime during the fall months of the year investigated. They worked one, two or three hours several evenings a week, the time mounting up to an average of thirteen working days for each one doing this overtime work. Then in the summer almost every factory was shut down through July and August. In this way all the women would have their annual wages reduced by a sixth while only a third had a chance to gain anything by overtime. This fact in itself tends to discredit the wage-rate as a measurement of earnings for the 80 per cent. who are time workers. Other figures emphasize the same fact. First a "normal week" was selected and the number of days worked by each woman in the finishing department was found. Half did not work full time. Then their computed weekly full-time earnings and actual earnings were compared; 8 per cent. were supposed to earn less than \$4 a week, but in reality 33 per cent. actually received that sum. In each wage group above \$4, fewer women were found than were nominally at that rate.

¹ "Women and the Trades," by Elizabeth B. Butler, p. 255.

² Ibid, p. 205.

³ Woman and Child Wage Earners, Vol. III.

TANNING

GLASS — SELECTED FACTORIES, 1907-8

(From *Women and Child Wage Earners*, Vol. III, pp. 404 and 405)

A. NUMBERS AND PERCENTAGES WORKING DIFFERENT NUMBERS OF DAYS WEEKLY IN A "NORMAL WEEK"—WOMEN 16 AND OVER

DAYS WORKED	Number	Per cent.
Full time, 6 days.....	1,386	50.0
5-6 days.....	■	22.6
4-5 days.....	358	12.9
3-4 days.....	239	8.6
Less than 3 days	164	5.9
Total.....	2,774	100.0

B. FULL TIME AND ACTUAL WEEKLY EARNINGS IN A "NORMAL WEEK"—ALL FEMALES

¹ Less than 1/10 of 1 %.

PAINT

A few women are employed, not in the making of paint itself, but in labeling cans. It is low grade, totally unskilled work and the employees are of a shifting character. They are busy through February, March and April, and again in September and October. Between times "half the force is dismissed when the spring and fall seasons of house repairing are over."¹

PAPER BAGS

In Kansas City it was reported by the Board of Public Welfare in 1912 that while the factories making paper bags are busy during the summer and fall, work is slack for the first five months of the year. The number of women was decreased by a fifth during this dull season, and those left at work had their earnings reduced on account of short time.

TANNERIES

The women who work in tanneries suffer from both short time and lack of work. In Massachusetts, during the first seven months of 1912 their numbers were a quarter less than in the latter part

¹ "Women and the Trades," by Elizabeth B Butler, p. 268.

of the year. An investigation of women workers in Milwaukee tanneries in 1908,¹ showed that for them "undertime was the great factor in reducing wages." For example, in one factory 68 women were employed during one fortnightly pay period, but only 16 of them worked full time and their average working hours were 119 instead of 130. The amount of work done in the two weeks would have provided 63 instead of 68 women with full-time employment. Again 66 girls were at work through a ten-day pay-period. Only 17 worked full time, and their average actual working hours for the ten days were 88. The full time hours were 100. Fifty-nine women, all on full time, could have done the work. A multitude of similar cases established the general conclusion.

TIN CANS

The manufacture of tin cans resembles that of paper boxes in that the cans are of little value in proportion to their bulk and are difficult to store. They are therefore usually made just as orders come in. Plants doing a general business are thus fairly steady, but those working for any seasonal industry are themselves highly seasonal. An example of the latter is one plant in a state prominent in fruit and vegetable canning which works for a canning factory.² Statistics show that for this establishment, from the middle of April till after the end of September, a force of 1,200 men, women and children are hard at work, often with overtime. Then the business drops down to practically nothing, and all the workers except perhaps 100 are discharged.

TOBACCO

Most work connected with the manufacture of tobacco is fairly steady. But in one line, the preparation of leaf tobacco for cigar manufacturers in warehouse factories in the South "the work begins in January and lasts for only about four months."³ Thus the women employed, (whose number cannot be determined since in all the statistics this process is included with others) must find work somewhere else during the greater part of the year.

¹ "Women Workers in Milwaukee Tanneries," by Irene Osgood, p. 1059. Part VII of the Report of the Wisconsin Bureau of Labor & Industrial Statistics, 1907-8.

² Woman and Child Wage Earners, Vol. XVIII, p. 57.

³ Ibid, p. 308.

III. MINIMUM WAGE AWARDS TO JANUARY 1, 1915
(Apply only to females unless otherwise stated)

State	Part of state covered	Commence effect	Kind of work covered	WORKERS AFFECTED		Wage rates	Legal hours per day or week	Computed rate per hour	Remarks
				Class	Age				
Massachusetts	All	Aug. 15, 1914	Brush industry	"Experienced time workers"	Any	15¢ each an hour	10 daily, 54 weekly		These rates also to yield at least 15¢ an hour
	All	Aug. 15, 1914	Brush industry	"Learners and apprentices"—time workers	Any		10 daily, 54 weekly	65% of above (—about 10¢)	Term of apprenticeship not more than one year
Minnesota	First-class cities	Nov. 22, 1914	Mercantile, office, waiters, hair-dressing occupations	"Women and minors of ordinary ability, except learners or apprentices"	Any	\$9.00 weekly	10 daily, 58 weekly	About 15¢	
	Second, third and fourth-class cities	Nov. 22, 1914	Same as above	as above	Any	\$8.50 weekly	10 daily, 58 weekly	About 14¢	
	Outside of first, second, third and fourth-class cities	Nov. 22, 1914	Same as above	Same as above	Any	\$8.00 weekly	10 daily, 58 weekly	About 13¢	
	First-class cities	Nov. 22, 1914	restaurant, or hotel occupations	Same as above	Any	\$8.75 weekly	9 daily, 54 weekly	About 16¢	
	Second, third and fourth-class cities	Nov. 22, 1914	Same as above	Same as above	Any	\$8.25 weekly	9 daily, 54 weekly	About 15¢	
	Outside of first, second, third and fourth-class cities	Nov. 22, 1914	Same as above	Same as above	Any	\$8.00 weekly	9 daily, 54 weekly	About 14¢	

Oregon	All	Jan. 4, 1913		All except apprentices and learners	14-18	\$1.00 a day	50 weekly, 8½ daily (longer hours by special permission of commission if each girl is working with adults and the shorter hours would cause the girls' dismissal)	12c	Oregon law says rates may be set. (General Laws, 1913, C. 62, section 6)
	Portland	Nov. 30, 1913	Manufacturing	"Experienced, adult women," paid by time rates	Over 18	\$8.64 weekly	54 weekly, 9 daily	16c	
	Portland	Nov. 30, 1913	Merchandise establishments	"Experienced, adult women"	Over 18	\$9.36 weekly	50 weekly, 8½ daily	18½c	
	Portland	Feb. 2, 1914	Office work	"Experienced, adult women"	Over 18	\$10 a week	51 weekly, 8½ daily		
	All	Feb. 7, 1914	"Any industry"	"Experienced, adult women," paid by time rates	Over 18	\$9.36 weekly	54 weekly	18½c	
	All	Feb. 7, 1914	"Any industry"	"Inexperienced, adult women" employed by time rates	Over 18	26 weekly	54 weekly	11½c	To be considered "inexperienced" not more than one year
Utah	All	May 13, 1913	All	All	Under 18	76c a day	54 weekly, 9 daily	8½c	
Rates set by C. 62, Laws of 1913	All	May 13, 1913	All	"Apprentices"	Over 18	90c a day	54 weekly, 9 daily	10c	Not to be "apprentices" more than a year
	All	May 13, 1913	All	"Experienced" workers	Over 18	\$1.26 a day	54 weekly, 9 daily	14c	
Washington	All	April 28, 1914	Merchandise establishments	"Apprentices"	Over 18	\$6 a week for 1st 6 months, \$7.50 a week for 2d 6 months	8 hours daily	13½c 16½c	Commission to issue licenses to employers for more than one year, more than one adult by be more than \$7.50

III. MINIMUM WAGE AWARDS TO JANUARY 1, 1915 — (Concluded)
(Apply only to females unless otherwise stated)

State	Part of state covered	Goes into effect	Kinds of work covered	WORKERS AFFECTED		Wage rates	Legal hours per day or week	Computed rate per hour	Remarks
				Class	Age				
Washington	All	June 27, 1914	Mercantile establishments	All	Over 18	\$10 a week	8 hours daily	20½¢	
	All	June 27, 1914	Mercantile establishments	"Persons of either sex"	Under 18	\$6 a week	8 hours daily, females. Hours of males not limited	12½¢	
	All	July 1, 1914	"Such class of occupation or employment as requires to be learned by apprentices"	"Apprentices"	Any	Wages below minimum to be fixed by commission based on previous experience of applicant and particular occupation	8 hours daily		Commission to issue a special license to each such applicant employee
	All	Aug. 1, 1914	"Any factory establishment"	All	Over 18	\$8.90 a week	8 hours per day	18½¢	
	All	Aug. 1, 1914	"Any factory establishment"	"Persons of either sex"	Under 18	\$6 a week	8 hours daily, females. Hours of males not limited	12½¢	
	All	Aug. 24, 1914	Laundries and dye works	All	Over 18	\$9 a week	8 hours daily	18½¢	
	All	Aug. 24, 1914	Laundries and dye works	"Person of either sex"	Under 18	\$6 a week	8 hours daily, females. Hours of males not limited	12½¢	
	All	Sept. 7, 1914	Telephone and telegraph establishments	All	Over 18	\$9 a week	8 hours daily	18½¢	
	All	Sept. 7, 1914	Telephone and telegraph establishments	"Persons of either sex"	Under 18	\$6 a week	8 hours daily, females. Hours of males not limited	12½¢	
	All	Feb. 20, 1915	Stenographer, bookkeeper, typist, billing clerk, filing clerk, cashier, checker, invoice or any clerical work of any kind in any establishment whatsoever	"Any female"	Over 18..	\$10 per week	8 hours per day	20 5-6¢	
	All	Feb. 20, 1915	As above	"Person of either sex"	16-18	\$7.50 per week	8 hours per day, females. Hours of males not limited	15 5-12¢	
	All	Feb. 20, 1915	As above	"Person of either sex"	Under 16	\$6 per week	8 hours per day, females. Hours of males not limited	12 ½¢	

IV. A PROPOSED MEASURE TO INSURE A STEADY INCOME

In order to insure workers a given income for a definite period of time the following proposal was made in March, 1914, by Mr. Robert G. Valentine, chairman of the Wage Board for the brush industry under the Massachusetts Minimum Wage Commission.

DESCRIPTIVE STATEMENT OF THE ACTUAL WORKING OF RULE I, WHICH THE CHAIRMAN WAS DIRECTED BY THE BOARD TO MAKE

Rule I.— That a minimum salary by ten-week periods be combined with an hourly time rate or piece rate system of pay and workers shall receive each week after ten weeks of employment and as long as they are on the payroll not less than that minimum salary less proportionate deductions according to the hourly rate for voluntary absence. This minimum salary shall be computed as follows: Each weekly pay day the minimum weekly rate set by this Board shall be multiplied by ten, and if the total earnings of the employee during the ten-week period immediately preceding each weekly pay day do not equal that amount the difference shall be paid to her each week.

Rule II.— The minimum weekly rate set by the Board governs the hourly rate that may be deducted under Rule I for voluntary absence.

For purposes of illustration I have chosen four-week periods instead of ten week periods simply to avoid taking up space.

The earnings of a worker are shown for 12 weeks. The third column shows the amounts that would have to be made up to meet the minimum wage of \$7.75, *if the settlement were made each week for that week only*. The fourth column shows the amount that would have to be made up to meet the minimum wage of \$7.75, *if the settlement were made each week for a four-week period*, according to the provisions of Rule I.

It will be seen from the figures that under the first method, the manufacturer in the course of the 12 weeks listed would have to pay \$12.20; under the second system, he would have to pay \$9.70.

The second system is the one laid down by the rule.

DESCRIPTIVE TABLE CONTRASTING PAYMENTS MADE ON WEEKLY AND FOUR WEEKLY BASIS

WEEKS	Weekly earnings	AMOUNT NECESSARY TO MAKE UP THE MINIMUM		Minimum wage
		By each week	By 4 week periods	
First.....	\$6 50	\$1 25	.....	\$7 75
Second.....	8 00	.....	.....	7 75
Third.....	8 50	.....	.....	7 75
Fourth.....	5 50	2 25	.....	7 75
	\$28 50	.....	\$2 50	\$31 00
Second.....	\$8 00	.....	.....	\$7 75
Third.....	8 50	.....	.....	7 75
Fourth.....	8 00 (5 50 + 2 50)	.....	.....	7 75
Fifth.....	4 30	3 45	.....	7 75
	\$28 80	.....	2 20	\$31 00
Third.....	\$8 50	.....	.....	\$7 75
Fourth.....	8 00	.....	.....	7 75
Fifth.....	6 50 (4 30 + 2 20)	.....	.....	7 75
Sixth.....	9 00	.....	.....	7 75
	\$32 00	.....	.....	\$31 00
Fourth.....	\$8 00	.....	.....	\$7 75
Fifth.....	6 50	.....	.....	7 75
Sixth.....	9 00	.....	.....	7 75
Seventh.....	8 50	.....	.....	.....
	\$32 00	.....	.....	\$31 00
Fifth.....	\$6 50	.....	.....	\$7 75
Sixth.....	9 00	.....	.....	7 75
Seventh.....	8 50	.....	.....	7 75
Eighth.....	8 00	.....	.....	7 75
	\$32 00	.....	.....	\$31 00
Sixth.....	\$9 00	.....	.....	\$7 75
Seventh.....	8 50	.....	.....	7 75
Eighth.....	8 00	.....	.....	7 75
Ninth.....	5 00	2 75	.....	7 75
	\$30 50	.....	50	\$31 00
Seventh.....	\$8 50	.....	.....	\$7 75
Eighth.....	8 00	.....	.....	7 75
Ninth.....	5 50 (5 00 + .50)	.....	.....	7 75
Tenth.....	6 00	1 75	.....	7 75
	\$28 00	.....	3 00	\$31 00

DESCRIPTIVE TABLE—(Concluded)

WEEKS	Weekly earnings	AMOUNT NECESSARY TO MAKE UP THE MINIMUM		Minimum wage
		By each week	By 4 week periods	
Eighth.....	\$8 00	.....	.....	\$7 75
Ninth.....	5 50	.....	.....	7 75
Tenth.....	9 00 (6 00+3 00)	.....	.....	7 75
Eleventh.....	7 00	\$0 75	.....	7 75
	\$29 50	.....	\$1 50	\$31 00
Ninth.....	\$5 50	.....	.....	\$7 75
Tenth.....	9 00	.....	.....	7 75
Eleventh.....	8 50 (7 00+1 50)	.....	.....	7 75
Twelfth.....	8 00	.....	.....	7 75
	\$31 00	\$12 20	\$9 70	\$31 00

INDEX TO SENATE DOCUMENTS, 1915

	Doc. No.
A	
Agriculture, State Department, annual report.....	21
Appropriations, answer of State Comptroller to resolution on.....	64
Architect, report on site for State office building in Buffalo.....	15
Athletic Commission, annual report.....	72
Attorney-General, annual report.....	17
B	
Banks, Superintendent of, annual report on banks of deposit and discount.	10
Bedford, New York State Reformatory for Women, annual report.....	24
Bills, Senate, supplemental index.....	73
Bloomington Hospital, report of Commission to investigate.....	46
Boards, commissions and departments, <i>see specific names of.</i>	
Buffalo, Charity Organization Society, annual report.....	47
C	
Canal bonds, answer of State Comptroller to resolution on.....	63
Canals, <i>see</i> Sinking funds.	
Charities, State Board of, annual report.....	45
Charity Organization Society of Buffalo, annual report.....	47
Civil practice, report of the Board of Statutory Consolidation on the simplification of	70
Civil service allowances after termination of service, report of committee on	71
Claims, Board of, annual report.....	12
Commissions and departments, <i>see specific names of.</i>	
Committees, standing, list.....	4
revised list	26, 31, 40, 41
Commutations granted by Governor, statement of.....	59
Comptroller, answer of, to resolution of March 3.....	63
answer of, to resolution of April 1.....	64
Cooper Union for the Advancement of Science and Art, report.....	65
Craig Colony for Epileptics, annual report.....	7
D	
Departments, <i>see specific names of.</i>	
Diseases, malignant, <i>see</i> Malignant diseases.	
E	
Efficiency and Economy, Department of, report on State institutions.....	37
report on State highways.....	38
Elmira Reformatory, report of the Board of Managers.....	55
Engineer and Surveyor, State, annual report.....	18
Excise, Commissioner of, annual report.....	19
F	
Factory Investigating Commission, report.....	43
report of Lawrence M. D. McGuire of.....	50
Finance, committee on, report on its investigation of State finances....	57
Financial condition of the State, message from the Governor relative to..	48
Fire Island State Park Commission, annual report.....	27
Fire Marshal, State, annual report.....	34

	Doc. No.
G	
Governor, statement of pardons, commutations and reprieves granted by.	59
Governor's messages	2
financial condition of the State.....	48
New York Charter, returning bill relating to disposition of refuse..	62
Tax Law, recommending changes in.....	22
H	
Health Officer, Port of New York, annual report.....	5
Highways, report of Department of Efficiency and Economy on.....	38
<i>See also</i> Sinking funds.	
Highways, State Commission, annual report.....	16
Housing of people in cities of the second class, report of commission to investigate	25
Hudson, New York State Training School for Girls, report.....	29
I	
Institute for Study of Malignant Diseases, annual report.....	6
Insurance, Superintendent of, annual report.....	44
Iroquois, Thomas Indian School, annual report.....	14
L	
Letchworth Village, annual report of managers.....	8
report of advisory committee on development of.....	28
Library, State, annual report.....	56
M	
McGuire, Lawrence M. D., report of.....	50
Malignant Diseases, State Institute for Study of, annual report.....	6
Members of the Senate, list.....	1
Mentally deficient, report of Commission to Investigate provision for..	42
Messages from the Governor, <i>see</i> Governor.	
Municipal Civil Service Commission, New York, report of investigation of	35
N	
Napanoch Reformatory, report of the Board of Managers.....	55
New York, Municipal Civil Service Commission, report of investigation of	35
New York, message of Governor returning bill relating to disposition of refuse	62
New York Catholic Protectory, annual report.....	54
New York Hospital, Society of, report of commission to investigate....	46
New York State Custodial Asylum for Feeble-minded Women, Newark, annual report	23
New York State Hospital for Incipient Pulmonary Tuberculosis, annual report	36
New York State Library, annual report.....	56
New York State Reformatory for Women, Bedford, annual report.....	24
New York State Training School for Girls, Hudson, report.....	29
Newark, New York State Custodial Asylum for Feeble-minded Women, annual report	23
Niagara river, diversion of water for power purposes, report of joint committee	66
P	
Pardons granted by Governor, statement of.....	59
Patten, Bernard M., report of Committee on Privileges and Elections rela- tive to contest against Christian Weiland.....	60
Polygamy, resolution from the General Assembly of Connecticut rela- tive to	61
Port of New York, Health Officer, annual report.....	5

	Doc. No.
Prison Association of New York, annual report.....	68
Prisons, Superintendent of, annual report.....	39
Privileges and Elections, Committee on, report relative to contest by Christian Weiland against Bernard M. Patten.....	60
Probation Commission, annual report.....	51
Public Service Commission, First District, annual report.....	20
Public Service Commissions, final partial report of Joint Committee to investigate	53
final report of.....	69
Public Works, Superintendent of, report.....	30

R

Racing Commission, annual report.....	58
Ray Brook, New York State Hospital for Incipient Tuberculosis, report..	36
Reformatories at Elmira and Napanoch, Board of Managers, report.....	55
Reprieves granted by Governor, statement of.....	59
Rules of the Senate.....	3
revised and adopted.....	32

S

Saratoga Springs, Commissioners of State Reservation at, annual report.	9
Senate, bills, supplemental index.....	73
committees, list	4
revised list	26, 31, 40, 41
members, list	1
rules of	3
revised and adopted.....	32
Senate and Assembly, address to the people by the Joint Republican caucus of	67
Sinking fund, address to the people by Joint Republican caucus.....	67
Standing committees, <i>see</i> Committees.	
State boards, commissions and departments, <i>see specific names of.</i>	
State institutions, report of Department of Efficiency and Economy....	37
State Library, annual report.....	56
Statutory Consolidation, report of Board on the simplification of the civil practice	70
Supplemental index	73

T

Tax Commissioners, annual report.....	11
Tax Law, message from Governor recommending changes in.....	22
Telephone and telegraph companies, report of joint committee to in- vestigate	49
Thomas Indian School, Iroquois, annual report.....	14
Travis, Eugene M., <i>see</i> Comptroller.	

W

Weights and Measures, Superintendent of, annual report.....	13
Weiland, Christian, report of Committee on Privileges and Elections relative to contest against Bernard M. Patten.....	60
Workmen's Compensation Commission, annual report.....	52

